

IN THE
United States
Court of Appeals
For the Ninth Circuit
1957 TERM

JOHN PHILLIP ZANNARAS,
J. P. ROBINSON, JR. and
U. S. TUNGSTEN
CORPORATION,

Appellants,

vs.

BAGDAD COPPER
CORPORATION,
a Corporation,

Appellee.

} Appeal from the
United States
District Court
for the District
of Arizona.

BRIEF OF APPELLANTS

MOEUR & JONES
ANTHONY O. JONES
416 Security Building,
Phoenix, Arizona
Attorneys for Appellants



TABLE OF CONTENTS

	Page
JURISDICTION	2
STATEMENT OF THE CASE	5
CONCISE STATEMENT OF POINTS	15
ARGUMENT	19-70
BURDEN OF PROOF	19
RES JUDICATA	26
RULE OF THE LAW OF THE CASE	34
PRIMA FACIE CASE	40
CHANGE OF METHOD AND MEANS OF DIVERSION	45
ADMITTED USE OF MORE WATER THAN ENTITLED TO USE UNDER CERTIFI- cate OF WATER RIGHT	52
USE OF WATER FOR PURPOSES OTHER THAN FOR ITS OWN MINING OPERATION	53
FINDINGS OF STATE ENGINEER ENTITLED TO RESPECT	55
JUDGMENTS CONTRARY TO WEIGHT OF EVIDENCE	58
DEPRIVATION OF PROPERTY WITH- OUT DUE PROCESS OF LAW	67
FAILURE TO FIND PRIORITY, A MATERIAL ISSUE	69
CONCLUSION	70
APPENDIX	72

STATUTES

	Page
Arizona Revised Statutes, Secs. 45-102, 3	56
Arizona Revised Statutes, Sec. 45-109	67
28 U.S.C.A. Sec. 1291	5
28 U.S.C.A. Sec. 1332	5

TREATISES

	Page
Kinney on Irrigation and Water Rights (2d ed.)	20, 42, 52, 68, 70
67 C.J. p. 1061 notes 25 and 26	21
5 C.J.S. Appeal and Error, Sec. 1964	35
50 C.J.S. Judgments, Sec. 682	27
93 C.J.S. Waters, Sec. 201a	21
3 AmJur Appeal and Error, Sec. 531	38
3 AmJur Appeal and Error, Sec. 985	35
3 AmJur Appeal and Error, Sec. 995	34, 35
3 AmJur Appeal and Error, Sec. 1166	32
3 AmJur Appeal and Error, Sec. 1234	38
30 AmJur Judgments, Sec. 161	26
30 AmJur Judgments, Sec. 165	27
30 AmJur Judgments, Sec. 172	27
30 AmJur Judgments, Sec. 179	27

CONSTITUTIONS

	Page
Constitution of the United States, XIV Amdt.	69
Constitution of the State of Arizona, Art. 2, Sec. 4....	69

CITATIONS

Cases

Page

Adams et al vs. State ex rel Motherseed Bank Com'r. 133 Okl. 194, 271 P. 946	33
Alamosa etc Co. vs. Nelson, 42 Colo. 140, 93 P. 1112	20
Albion-Idaho Land Co. vs. NAF Irr. Co. 97 F. 2d 439	14, 43, 45
Alderson vs. Horse Creek Coal Land Co. 81 W. Va. 411, 94 SE 716	27
Allendale Irr. Co. vs. State Water Conservation Board, 113 Mont. 436, 127 P. 2d 227	21
Bagdad vs. Zannaras, 229 F. 2d 920	4, 11, 12, 14, 16, 18, 39, 41, 61
Barber Creek, 43 Nev. 403, 182 P. 925	57
Bassett Creek and its Tributaries (Nev. 1945) 155 P. 2d 324	57
Beloit vs. Morgan, 7 Wall. (US) 619, 19 L ed 205.....	27
Bennett vs. City of Salem, 235 P. 2d 772	28
Boland vs. Nihlros et ux (Utah 1932) 10 P. 2d 930....	28
Bridge Co. vs. Stewart, 3 How. 413	37
Carlson vs. City of Helena, 43 Mont. 1, 114 P. 110.....	69
Carson et al. vs. Hayes et al. 39 Or. 97, 65 P. 814.....	64
Cash vs. Thornton, 3 Colo. App. 475, 34 P. 268	70
Cloverdale vs. Smith, 128 Cal. 230, 60 P. 851	70
Cole et al. vs. Richards Irr. Co. et al 27 Utah 205, 75 P. 376	64
Comanche Ice & Fuel Co. vs. Binder & Hillery, 70 Okl. 28, 172 P. 629	33
Creek vs. Bozeman Waterworks Co., 15 Mont. 121, 38 P. 459	55

	Page
Cressler vs. Brown et al. (Okl. 1920) 192 P. 417	28
Daggs vs. Howard Sheep Co., 16 Ariz. 283, 145 P. 140	69
Davidson vs. Dallas, 15 Cal. 75	37
Davies vs. Angelo, 8 Cal. App. 305, 96 P. 909	70
Deepwater Railway Co. vs. Honaker et al. 66 W. Va. 136, 66 SE 104, 27 L.R.A., N.S. 388, at P. 394.....	57
DeHaas vs. Benesch, 116 Colo. 344, 181 P. 2d 453.....	21
Donich vs. Johnson, 77 Mont. 229, 250 P. 963.....	21, 23
Dowell vs. Applegate, 152 US 327, 14 S Ct. 611.....	27
Enlarged Southside Irr. Ditch Co. vs. John's Flood Ditch Co. 116 Colo. 580, 183 P. 2d 552.....	51, 55
Farmers Highline Canal & Reservoir Co. et al. vs. City of Golden et al. (Colo. 1954) 272 P. 2d 629	51, 52, 55
Farmers' State Bank vs. Clayton Nat. Bk. (N. M. 1925) 245 P. 543	36
Gallagher vs. Kelliher, 58 Ore. 557, 114 P. 943, 115 P. 596	65
Gassert vs. Noyes et al., 18 Mont. 216, 44 P. 958.....	51
Goodeagle vs. Moore, 89 Okla. 211, 214 P. 725.....	28, 33
Greely and Loveland Irr. Co. vs. Huppe, 60 Colo. 535, 155 P. 386.....	21
Hague vs. Nephi Irr. Co. 16 Utah 421, 52 P. 765.....	55
Haight vs. Tryon, 112 Cal. 4, 44 P. 318.....	70
Hawley vs. Smith, 45 Ind. 183.....	36, 37
Hay vs. Salisbury, 92 Fla. 446, 109 So. 617.....	27
Healy vs. Moore, (Mo. App.) 100 SW 2d 601.....	27
Howard vs. Huron, 5 SD 539, 59 NW 833.....	27
Huffman vs. State, 30 Ala. 532.....	37

	Page
Jackson vs. Cowan, 33 Id. 525, 196 P. 216.....	22
Jeremy Fuel & Grain Co. vs. Mellen, 50 Utah 49, 165 P. 791.....	28
Johnson vs. Gillett, 66 Okl. 308, 168 P. 1031.....	33
Joyce vs. Murphy Land & Irr. Co. (Idaho 1922) 208 P. 241	28
Kibler vs. Bridges, 5 S.C. 335.....	37
Lawrence vs. Vernon (CC) 3 Sumn. 20, Fed. Cas No. 8, 146.....	27
Logan, Hyde Park & Smithfield Canal Co. vs. Logan City, 72 Utah 221, 269 P. 776.....	70
Loyning et al vs. Rankin et al (Mont. 1946) 165 P. 2d 1006.....	64
Mannix & Wilson et al vs. Thrasher, et al (Mont. 1933) 26 P. 2d 373.....	51
McKee, Ex'x. vs. Producers' & Refiners' Corp. et al 170 Okl. 559, 41 P. 2d 466.....	33
Manning et al. vs. Fife et al 17 Utah 232, 54 P. 111....	55
Medano Ditch Co. vs. Adams, 29 Colo. 317, 68 Pac. 431, 435.....	42
Midway Irrigation Co. vs. Snake Creek Mining and Tunnel Co. 271 F. 157 (Cert. granted 41 S. Ct. 536, 256 U.S. 687, 65 L Ed. 1172, and aff. 43 S. Ct. 215, 260 U.S. 596, 67 L. Ed. 423).....	21
Miller vs. Kearnes, 45 Ariz. 548, 46 P. 2d 638, 640.....	27
Moe et al. vs. Harger et al., 10 Idaho 302, 77 Pac. 645	24
Morehouse vs. City of Everett (Wash. 1926) 252 P. 157	33
Mountain Lake Mining Co. vs. Midway Irr. Co., 47 Utah 346, 149 Pac. 929.....	22
Neil vs. Hyde (Idaho 1919) 186 Pac. 710.....	25, 28

Norwood vs. Eastern Oregon Land Co. (Oregon 1931) 5 P. 2d 1057	36
Page vs. Fowler, 37 Cal. 100	37
Parker vs. Pomeroy, 2 Wis. 84	37
Peterson vs. Wood, 71 Utah 77, 262 Pac. 828.....	21
Phelan vs. San Francisco, 20 Cal. 39.....	37
Platte Valley Irr. Co. vs. Buckers, etc. 25 Colo. 77, 53 Pac. 334	69
Portland Trust Co. vs. Coulter, 23 Or. 131, 31 Pac. 280, 281, 282.....	36, 38
Price et al. vs. Clement (Okla. 1940) 102 P. 2d 595	28, 33
Rasmussen vs. Moroni Irr. Co. 56 Utah 140, 189 Pac. 572	22
Ripley vs. Storer, 309 NY 506, 132 NE 2d 87, Motion den 309 NY 976, 132 NE 2d 335.....	27
Salt River Valley Waters Users Assn. vs. Norveil, 29 Ariz. 360, 241 Pac. 503, rehearing denied 29 Ariz. 499, 242 P. 1013	69
Scossa vs. Church, 46 Nev. 254, 205 P. 518, 210 P. 563	57
Seabrook vs. Coos Bay Ice Co., 49 Ore. 237 89 P. 417	65
Silkey vs. Tiegs, (Idaho 1934) 28 P. 2 1037, 1038.....	24
Silver King Consol. Mining Co. vs. Sutton, 85 Utah 297, 39 P. 2d 682.....	21
Smyth vs. Jenkins, (Ore. 1956) 299 P. 2d 819.....	57
Spaulding vs. Stone, 46 Mont. 43, 129 Pac. 327.....	22
Stacy Railroad Co. 32 Vt. 552	37
State ex rel Barnett, Bank Comr. vs. Wood, 171 Okla. 341, 43 P. 2d 136	28, 33

Stewart vs. Phoenix Nat. Bk. 49 Ariz. 34, 64 P. 2d 101	27
In re Sullivan's Estate, 51 Ariz. 483, 78 P. 2d 132, 135	27
Sutphin vs. Speik (Calif. 1940) 99 P. 2d 652; Rehearing 101 P. 2d 497	28
Tally vs. Ganahl, 151 Cal. 418, 90 P. 1049.....	36
Thomson vs. Albert, 15 Md. 268	37
Tudor vs. Jaca et al. (Ore. 1946) 165 P. 2d 770.....	51, 52
United States vs. The Haytian Republic, 154 US 118, 38 L ed 930, 14 S Ct 992.....	27
United Tire & Inv. Co. vs. Hines, Okl. Sup. 96 P. 2d 1047	33
Van Tassel Real Estate & Live Stock Co. vs. City of Cheyenne et al. (Wyo. 1936) 54 P. 2d 906.....	51
White vs. Ladd, 41 Or 324, 68 P 739, 93 Am St Rep 732	27
White vs. White, 106 Pa Super Ct 85, 161 A 464.....	38
Wilkes vs. Davies, 8 Wash. 112, 35 Pac. 611, 23 L.R.A. 103; (Wash. 1894) 35 P. 611.....	36
Willey et al. vs. Decker et al., 11 Wyo. 496, 75 P. 210	64
Yates vs. Kuhl (Calif. 1955) 279 P. 2d 563.....	28
Young vs. Black, 7 Cranch (US) 565, 3 L ed 440.....	27

INDEX TO EXHIBITS

1949 Trial

<i>Exhibit No.</i>	<i>Id.</i>	<i>In Ev.</i>
1	R. 43	14248 R. 55
2	R. 50	R. 51
3	R. 50	R. 52
4	R. 50	R. 53
5	R. 50	R. 53
6	R. 50	R. 53
7	R. 50	R. 55
B	R. 184	R. 185
C	R. 184	R. 189
D	R. 184	R. 189
E	R. 184	R. 184
I	R. 239	R. 240
J	R. 239	R. 240
K	R. 244	R. 245
L	R. 272	R. 272
L-1	R. 323	R. 324
M	R. 324	R. 332
N	R. 331	R. 334

1952 Trial

1	14248 R. 56	14248 R. 63
2	14248 R. 67	14248 R. 68
3	14248 R. 75	14248 R. 75
4	14248 R. 78	14248 R. 78
5	14248 R. 79	14248 R. 79
6	14248 R. 71	14248 R. 82

INDEX TO EXHIBITS

(cont'd.)

1952 Trial

<i>Exhibit No.</i>	<i>Id.</i>	<i>In Ev.</i>
7	14248 R. 87	14248 R. 87
8	14248 R. 89	14248 R. 90
10		14248 R. 109
12	14248 R. 301	14248 R. 301
13		14248 R. 359
14		14248 R. 354
16		14248 R. 360
A	14248 R. 62	14248 R. 63
B	14248 R. 163	14248 R. 170
D	14248 R. 244	14248 R. 244
E	14248 R. 253	14248 R. 253
F	14248 R. 256	14248 R. 257
G		14248 R. 274
H	14248 R. 288	
I		14248 R. 296
J		14248 R. 347
K		14248 R. 335
L		14248 R. 335

1954 Trial

N	R. 357	R. 361
O	R. 368	R. 370
Q	R. 380	R. 660
R	R. 390	R. 660
S		R. 406

INDEX TO EXHIBITS
(cont'd.)
1954 Trial

<i>Exhibit No.</i>	<i>Id.</i>	<i>In Ev.</i>
T	R. 409	R. 411
U	R. 411	R. 412
X	R. 415	R. 607
Y	R. 421	R. 504
Z		R. 503
AA	R. 509	R. 531
AB	R. 514	R. 561
AC	R. 578	R. 580
AD	R. 578	R. 580
AE	R. 607	R. 609

IN THE
United States
Court of Appeals
For the Ninth Circuit

1957 TERM

JOHN PHILLIP ZANNARAS,
J. P. ROBINSON, JR. and
U. S. TUNGSTEN CORPORATION

Appellants,

vs.

No.
15640

BAGDAD COPPER CORPORATION
a Corporation,

Appellee.

BRIEF OF APPELLANTS

For the purpose of clarity, John Phillip Zannaras, J. P. Robinson, Jr. and U. S. Tungsten Corporation, an Arizona corporation, Plaintiffs in the District Court and appellants herein, will hereinafter be referred to as Zannaras-Robinson, and Bagdad Copper Corporation, a Delaware corporation, Defendant in the District Court and appellee herein, will hereinafter be referred to as Bagdad.

Reference to the printed Transcript of Record will be indicated by the letter "R" followed by the page number. Reference to the printed Transcript of Record

in Cause No. 14248 of this Court which has been ordered to be a part of this record on appeal will be indicated by "14248", the letter "R" and followed by the page number.

JURISDICTION

The above entitled proceeding arises upon an appeal from a judgment entered in an initial action by John Phillip Zannaras and J. P. Robinson, Jr., residents and citizens of the State of Arizona, against Bagdad Copper Corporation, a Delaware Corporation. (Civil Cause No. 221.) During the course of the trial on May 13, 1952, on motion of counsel for John Phillip Zannaras and J. P. Robinson, Jr., the U. S. Tungsten Corporation, an Arizona corporation was added as a party plaintiff. (Docket entry May 13, 1952 R. 643-644.)

By their complaint filed July 12, 1948, (R. 3) Zannaras-Robinson pled their priority to the use of water from Burro Creek for their mining operations by reason of a certificate of water right issued by the Arizona State Land Department with a priority date of August 27, 1940, for the use from Burro Creek of 3,000,000 gallons of water per annum, in accordance with the terms of said certificate, alleged that the use of water by Bagdad, a junior appropriator upstream from Zannaras-Robinson, was depriving Zannaras-Robinson (downstream prior appropriators) of water to which they were entitled. An injunction was sought, requiring Bagdad to allow sufficient water to pass Bagdad's upstream point of diversion so as to allow Zannaras-Robinson to have the full use and enjoyment of the Zannaras-Robinson prior water rights, and enjoining and restraining Bagdad from interfering therewith. Damages were also sought amounting to \$1,500.00 per day from June 28, 1948, until such time as Bagdad ceased to interfere with the water rights of Zannaras-Robinson.

A motion for leave to amend complaint was filed October 18, 1948, (R. 9-10) and the motion was granted. (Docket entry R. 639).

The action was tried by the District Court sitting without a jury, on March 3rd and 4th, 1949, (R. 38 to 346). After trial the District Court, on March 27, 1949, by minute order, (R. 640) found that "Ptfs having failed to prove the allegations of their Complaint by a preponderance of the evidence, Order that judgment will be entered for the defendant herein." Over the objection of Zannaras-Robinson, Findings of Fact, Conclusions of Law and Judgment was entered January 2, 1951, denying relief to Zannaras-Robinson but retaining jurisdiction. (R. 12)

In accordance with the interlocutory order of the District Court, Zannaras-Robinson filed a petition for relief February 8, 1951 (R. 13-16), alleging continued deprivation of water by Bagdad, which was amended on March 28, 1951. (R. 18-21). Trial was had on the amended petition for relief after the District Court consolidated for trial this action (Civil Cause No. 221) and Civil Cause No. 321, entitled Bagdad Copper Corporation, a corporation, Plaintiff, vs. John Phillip Zannaras and J. P. Robinson, Jr., Co-partners, and U. S. Tungsten Corporation, Defendants. This latter case, Civil Cause No. 321, was decided by the District Court on November 12, 1953 (14248 R.) and affirmed by this Appellate Court on January 30, 1956, being cause number 14248 of this Court. (229 F 2d 920).

Based upon the opinion of this Appellate Court in Civil Cause No. 14248, reported in 229 F. 2d 920, involving the same parties, determining the same water rights, plus the fact that supporting evidence for both cases was adduced at the same hearing when the two actions were consolidated for trial, this appeal seeks enforce-

ment of the mandate of this Appellate Court decreeing the water rights of the parties. Jurisdiction is therefore asserted on this basis among others.

Upon the completion of the taking of testimony on May 14, 1952, both cases, Civil Causes No. 221 and 321, were submitted to the District Court. The District Court rendered a decision in Civil Cause No. 321 (not this case on appeal) on November 12, 1953, entering judgment in favor of the defendants John P. Zannaras, J. P. Robinson, Jr. and U. S. Tungsten Corporation, and against the plaintiff Bagdad Copper Corporation. The judgment in Civil Cause No. 321 was appealed to this Court and affirmed on January 30, 1956, in Circuit Court Cause No. 14248, (229 F 2d 920).

On December 5, 1953, and prior to the affirmation of the judgment in Civil Cause No. 321, Zannaras-Robinson filed a Renewal of Motion to set this cause for hearing (Civil Cause No. 221). (R. 23-25). Hearing was had before the Court. The District Court, by memorandum, filed March 29, 1957, determined that "Plaintiffs having failed to prove by a preponderance of the evidence that defendant has appropriated any of plaintiffs' water, they are not entitled to an injunction." (R. 32) Findings of fact and conclusions of law were submitted by Bagdad, and over the objection of Zannaras-Robinson, approved and settled by the Court, and judgment entered April 17, 1957, denying to Zannaras-Robinson any relief. (R. 32-35). Said judgment being diametrically opposed to the Findings of Fact, Conclusions of Law and Judgment theretofore rendered by the same District Court, involving the same parties, the same water rights and the same evidence in Civil Cause No. 321, (14248 R. 37-40), and affirmed by this Appellate Court as reported in 229 F. 2d 920.

The action is one between residents and citizens of different states and the amount in controversy exceeds \$3,000.00, exclusive of interest and costs. The jurisdiction of the District Court rested upon diversity of citizenship. 28 U.S.C.A. Sec. 1332.

The judgment having become final, the present appeal is predicated upon 28 U.S.C.A. Sec. 1291.

STATEMENT OF THE CASE

Chronological History

About June 1, 1940, John Phillip Zannaras and John P. Robinson leased the Mystery Gold mining claims, situated approximately 45 miles in a northwesterly direction from Congress, Yavapai County, Arizona (R. 41). They located a millsite alongside Burro Creek. Zannaras-Robinson proceeded building and operating a mill (R. 41), using water from Burro Creek for mining, milling and domestic purposes (R. 44). In the fall of 1941 Zannaras-Robinson located a group of tungsten mining claims (R. 88), proceeded to develop these claims, and entered into a 5-year contract with the U. S. General Services Administration, under which the Federal Government was to purchase their production (14248 R. 89, R. 637). Their mine was given the highest priority for materials and serialized by the Defense Metal Administration (14248 R. 90). They patented 8 mining claims and one millsite, and located and filed on 47 unpatented mining claims (14248 R. 353), spent \$250,000.00 on these properties up to the year 1952 (14248 R. 352), constructed a 250-ton mill, shipped ore to the Government stockpile assaying 1.92% WO₃ (R. 91), received \$4,000.00 for concentrates of tungsten shipped to Kennametal, Inc. (14248 R. 357) and custom milled ore for others. (14248 R. 236, 320).

Zannaras-Robinson applied for and received a Certificate of Water Right from the State of Arizona, with priority date of August 27, 1940, to divert and put to beneficial use for mining and domestic purposes 3,000,000 gallons of water from Burro Creek annually. (Ex. 1 1949 Trial, 14248 R. 22-24). Bagdad applied for and received a Certificate of Water Right from the State of Arizona, with priority date of November 4, 1941, to divert and put to beneficial use for mining purposes 315,360,000 gallons of water from Burro Creek annually. (14248 R. 397-400). It is significant to note that the application was for 600,000,000 gallons annually and was reduced by the State of Arizona Water Commissioner to 315,360,000 gallons annually. (14248 R. 304).

Burro Creek is a tributary of the Bill Williams River, which river in turn flows into the Colorado River. The Zannaras-Robinson point of diversion of water from Burro Creek is seven miles below the Bagdad point of diversion. (Ex. A 1952 trial and Ex. Q 1954 trial). Zannaras-Robinson are therefore the downstream prior appropriators, and Bagdad is the upstream junior appropriator. The Zannaras-Robinson mill is alongside Burro Creek, and their point of diversion is on Burro Creek (R. 40); the Bagdad mill is seven miles away from its point of diversion on Burro Creek.

Bagdad takes water from a sump at its point of diversion on Burro Creek which is a hole it has dug down fifteen feet below the surface of the natural bed of the creek. (R. 283). The Federal Government has installed gauges at that point to measure the amount of water flowing out of the sump after Bagdad has taken water for its use. (14248 R. 53).

This controversy over the waters of Burro Creek and the claim of damage by Zannaras-Robinson has been going on practically ever since late 1943, the time of the commencement of operations by Bagdad. In February 1945 Zannaras-Robinson brought suit against Bagdad, claiming that ever since December 1943 Bagdad had polluted and was continuing to pollute the waters of Burro Creek, making it impossible for Zannaras-Robinson, the downstream senior appropriators, to use the water to which they were entitled under their permit. Civil Cause No. 129, entitled J. P. Zannaras and J. P. Robinson, Jr. vs. Bagdad Copper Corporation, was filed in the United States District Court for the District of Arizona. After one day's trial, and prior to the commencement of the second day's trial, the parties, through their counsel, announced to the Court that a settlement had been reached whereby Bagdad agreed to pay and did pay Zannaras-Robinson the sum of \$1,000.00 as general damages and agreed to the issuance by the Court of an injunction against any further pollution by Bagdad of the waters of Burro Creek.

Early in the year 1945, which was about a year after the issuance of a water right to it by the State of Arizona (14248 R. 397), Bagdad rearranged the disposal of its tailings and its method of securing water, whereby its tailings disposal was removed from a position near Boulder Creek where water escaped back into Burro Creek, to a point three and one-half miles away, near the Bagdad Mill. Under the prior arrangement the tailings, containing 70% water (R. 172-176), escaped downstream with no chance of Bagdad reclaiming any of that water. Under the new arrangement Bagdad built a dam across an arroyo or wash, at the new tailing disposal location near the Bagdad Mill, and completely restrained the water from the Bagdad tailings from escaping into Burro Creek.

Bagdad admits it is pumping 1,100 acre feet of water which amounts to 358,436,100 gallons from Burro Creek per annum (R.471), which is in excess of the maximum amount that Bagdad can legally pump under its water right even if there was sufficient water in the creek after allowing water for Zannaras-Robinson as prior and superior downstream appropriators. This water according to Bagdad's own witnesses is used not only for Bagdad's own mining operation but is furnished by Bagdad to other mines in the vicinity and to persons living in the camp of Bagdad (R. 221, 222, 226), also in violation of Bagdad's water right.

This complaint (R. 3) was filed by Zannaras-Robinson on the 12th of July 1948 in the United States District Court for the District of Arizona, against Bagdad, alleging that Zannaras-Robinson were downstream prior appropriators being deprived of water to which they were entitled, by the illegal diversion by Bagdad, a junior upstream appropriator; they sought an injunction enjoining unlawful diversions and an order directing that sufficient water be let down by Bagdad to meet the needs of Zannaras-Robinson; they also sought damages of \$1,500.00 per day. Bagdad filed a general denial and, in defending this action in 1949, put on numerous witnesses, all of whom attempted to show that there was always the year around plenty of water at the Zannaras-Robinson point of diversion after the Bagdad diversions, and that therefore there was plenty of water for both diversions.

Without questioning the validity and priority of the Zannaras-Robinson water rights, the District Court, after trial, entered a minute order March 27, 1950, that "Ptfs. having failed to prove the allegations of their complaint by a preponderance of the evidence, Order that judgment will be entered for the defendants here-

in" (R. 640). Subsequently, on January 2, 1951, Findings of Fact, Conclusions of Law and Judgment was entered, over the objections of Zannaras-Robinson, denying relief to Zannaras-Robinson but retaining jurisdiction. (R. 12)

On February 8, 1951, Zannaras-Robinson filed a petition for relief in this same case (R. 13-16) based upon the retention of jurisdiction by the District Court, (as set forth in its Order dated January 2, 1951), which was amended March 28, 1951. (R. 18-21). Following the filing of the February 8, 1951 petition by Zannaras-Robinson for relief, Bagdad on March 5, 1951 filed a suit in the United States District Court for the District of Arizona, Civil Cause No. 321, entitled, Bagdad Copper Corporation, Plaintiff, vs. John Phillip Zannaras and J. P. Robinson, Jr., Defendants. (14248 R. 3-9). In Cause No. 321 Bagdad sought a "judgment decreeing and declaring that said Certificate of Water Right No. 1341 (The Zannaras-Robinson Certificate of Water Right) is void, and that the defendants (Zannaras-Robinson) have no rights thereunder, and decreeing and declaring that any rights which said defendants (Zannaras-Robinson) may have in and to the water of Burro Creek by reason of their (Zannaras-Robinson) said application of August 27, 1940, are no longer of legal force or validity and that the rights of plaintiff (Bagdad) in and to the waters of Burro Creek are superior to any rights of said defendants (Zannaras-Robinson) and quieting the rights of plaintiff (Bagdad) thereto; or decreeing and declaring in the alternative that defendants (Zannaras-Robinson) have no right in and to the water of said Burro Creek prior and superior to plaintiff's (Bagdad's) rights under its said application of November 5, 1941 in an amount in excess of one thousand gallons per year; together with such other and further relief as equity may require." (14248 R. 9) (Brack-

eted words within quotes supplied). The complaint further alleged that Bagdad was dependent upon the water which will be used by Zannaras-Robinson under their certificate of water right and that if the Zannaras-Robinson certificate was not voided that Bagdad would of necessity be forced to substantially lessen or close down its mining and milling operation, which would cause Bagdad a loss in excess of the sum of \$10,000 per annum. (14248 R. 5)

Zannaras-Robinson in answering the action filed against them by Bagdad denied the allegations, and answered defensively that Zannaras-Robinson were prior and superior certificated appropriators, that Bagdad, a junior and inferior appropriator, had, first by polluting, and later by drying up the creek, and thus depriving them of necessary water, made it impossible for Zannaras-Robinson to operate their mill, and further alleged that they could not economically operate their mill spasmodically. Zannaras-Robinson in the answer also pled affirmatively for an injunction enjoining Bagdad from interfering with water from Burro Creek to which Zannaras-Robinson, as prior and superior appropriators, were entitled. (14248 R. 10 et seq.)

In answering the Zannaras-Robinson Amended Petition for Relief, Bagdad filed a general denial, and in addition, (R. 22) pled by reference its complaint in Civil Cause No. 321 heretofore alluded to. (14248 R. 3-9)

Issue was joined on Civil Cause No. 221 (this case now on appeal), and on Civil Cause No. 321, the case mentioned in the foregoing paragraphs. The two cases (Civil Causes No. 221 and 321) were consolidated for trial and tried before the Court on May 13 and 14, 1952, on the same hearing. The evidence adduced at this

consolidated trial was applicable to both cases (Civil Causes No. 221 and 321) for matters involving the water rights of the parties hereto and the illegal deprivation by Bagdad of water to Zannaras-Robinson. These matters were expressly presented to and determined in favor of Zannaras-Robinson first by the District Court in Civil Cause No. 321 and affirmed by this Appellate Court in App. No. 14248 and reported in 229 F 2d 920.

It is significant that for this 1952 hearing Bagdad reversed its position in regard to water availability for the Zannaras-Robinson operation. In the 1949 trial heretofore alluded to, Bagdad, through its witnesses, attempted to convince the Court that there was always the year around plenty of water at the Zannaras-Robinson diversion point in Burro Creek after the diversion by Bagdad. In the trial in 1952 on the other hand, Bagdad, through its witnesses, attempted to convince the Court that the reason there was no water at the Zannaras-Robinson point of diversion in the summer months was because of the seasonal lack of water and not by reason of the pumping operations of Bagdad. This position was taken in the face of the Bagdad complaint in Civil Cause No. 321 (with which this cause on appeal was consolidated for trial) wherein Bagdad had, in its pleadings, alleged that if Zannaras-Robinson used the water to which they were entitled under their Certificate of Water Right, then the mining operations of Bagdad would be substantially lessened or that *Bagdad would have to close down*. We will later point out that even this reversed position was abandoned at the 1954 hearing.

Over the objection of Bagdad, findings of fact, conclusions of law and direction for entry of judgment, and judgment, were duly signed and filed November

12, 1953 in Civil Cause No. 321 (14248 R. 37 et seq.). The validity of the Zannaras-Robinson Certificate of Water Right was upheld, and findings of fact Number III found that : “*** For approximately five (5) months in each year, due mainly to plaintiff's (Bagdad's) pumping operations and use of water above, there was no water at the defendants (Zannaras-Robinson's) point of diversion” (bracketed words supplied) (14248 R. 39), and specifically ordered and decreed in the formal judgment which was entered November 12, 1953, that Zannaras-Robinson “*** are the owners of and entitled to the prior use of three million (3,000,000) gallons of water annually from Burro Creek***” and “***have the right as prior appropriator, to take water from Burro Creek” ***“without interference by plaintiff's (Bagdad's) use above.” (14248 R. 41, 42). (Bracketed word supplied.)

That judgment of the District Court was appealed by Bagdad to this Appellate Court, being assigned No. 14248, and was affirmed January 30, 1956. (229 F 2 920). The question of Bagdad depriving Zannaras-Robinson of water was involved in both Civil Cause No. 221 and 321 which were tried in 1952 on the same evidence as to facts and law on the same hearing and appear on the same record, and also as to the right of Zannaras-Robinson to use water from Burro Creek without interference by Bagdad. These issues were expressly presented to this Appellate Court by Bagdad in its statement of points on appeal of Civil Cause No. 321, (14248 R. 433-436), and also in Bagdad's brief on appeal. The judgment of the District Court was affirmed by this Court on January 30, 1956 (229 F 2 920) and a mandate dated March 2, 1956 directed to the United States District Court for the District of Arizona. Thereby this Appellate Court affirmed the prior right of Zannaras-Robinson to the use of 3,000,000 gallons of water per

annum from Burro Creek without interference by Bagdad. It also affirmed the finding of the District Court that the shortage of water at the Zannaras-Robinson point of diversion for five months of the year was due mainly to Bagdad's pumping operations.

Following the entry of judgment by the District Court on November 12, 1953 in Civil Cause No. 321 in favor of Zannaras-Robinson, and prior to the decision of the Appellate Court on that cause, Zannaras-Robinson filed, on November 18, 1953, a motion to set Civil Cause No. 221 (this cause on appeal) for further hearing, (R. 644) which was stricken from the calendar subject to renewal in the spring. (R. 644). On December 5, 1953 Zannaras-Robinson filed a Renewal of Motion to Set Cause for hearing. (R. 23-27). The object of this hearing is affirmatively shown on the face of the motion (wherein the judgment in favor of Zannaras-Robinson and against Bagdad in Civil Cause No. 321 was pleaded). The motion was granted without objection by Bagdad and hearing held by the Court in order to determine the character of judgment to be entered against Bagdad, without awaiting the then pending decision of this Appellate Court in Civil Cause No. 321 (App. No. 14248).

At the hearing of March 1954, Bagdad abandoned its former position that the reason there was no water at the Zannaras-Robinson point of diversion was because of the seasonal nature of the creek, and brought in expert witnesses to attempt to show by calculations, based upon hypothetical assumptions, that even though Bagdad diverted the entire flow of the creek during the summer months and part of the fall months, such diversion would have no effect upon the flow of water at the Zannaras-Robinson point of diversion as the water would have been lost by evaporation and transpiration.

In other words, Bagdad tried to relitigate facts and issue already adjudicated by the District Court in Civil Cause No. 321, which adjudication was then pending on appeal to this Appellate Court.

Upon the conclusion of the taking of testimony March 11, 1954, the case was submitted to the Court for decision. (R. 636)

In the meantime the decision of the District Court in Civil Cause No. 321 was affirmed by this Appellate Court (229 F 2d 920) on January 30, 1956, and thereafter a mandate was directed to the District Court. That decision was in favor of Zannaras-Robinson and against Bagdad. The judgment (14248 R. 37-43) decreed that Zannaras-Robinson were the owners of a valid Certificate of Water Right issued by the State of Arizona, entitling them to put to beneficial use 3,000,000 gallons of water per annum without interference by Bagdad's use above, and found that "For approximately five (5) months in each year, due mainly to plaintiff's (Bagdad's) pumping operation and use of water above, there was no water at the defendants' (Zannaras-Robinson) point of diversion." (Bracketed words within quotes supplied.)

Then on March 29, 1957, the District Court filed a memorandum on Petition for Relief. (R. 31). This memorandum is in part that, "The evidence submitted is not sufficient to enable the Court to find as a fact that during critical months of the year, even if Bagdad ceased its pumping operations, that water would reach the Zannaras point of diversion, and the rule announced in Albion-Idaho Land Co. vs. NAF Irr. Co. 97 F. 2d 439, would therefore appear to be applicable."

Thereafter, on April 17, 1957, Findings of Fact, Conclusions of Law and Judgment in favor of Bagdad and

against Zannaras-Robinson was signed, filed and docketed (R. 32-35) over the objection of Zannaras-Robinson.

CONCISE STATEMENT OF POINTS

1. The District Court erred in ruling that Burro Creek is a seasonal stream, generally wasting away, or tending to waste away during the months of June, July, August, and on occasion, September, in each year, depending upon the rainfall on its water-shed, and that during the remaining months of the year there is generally adequate water in Burro Creek for all claims of both plaintiffs and defendant.

2. The District Court erred in ruling in favor of the upstream junior appropriator defendant and against the downstream senior appropriator plaintiffs based upon the evidence being "insufficient to enable the Court to determine whether the pumping by the defendant Bagdad Copper Corporation during seasons of scarcity has any bearing" on the amount of water reaching the downstream senior appropriator plaintiffs' point of diversion.

3. The District Court erred in ruling that if the evidence is insufficient to enable the Court to determine as a fact that the use of water by an upstream junior appropriator results in injury to a downstream senior appropriator an injunction will not lie.

4. The District Court erred in ruling that the burden of proof was upon the downstream senior appropriator plaintiff to prove that the admitted pumping operations of the upstream junior appropriator defendant resulted in damage to the downstream senior appropriator plaintiffs.

5. The District Court erred in its ruling denying the application of the downstream senior appropriator plaintiffs for an injunction restraining the upstream junior appropriator defendant from interfering with the right of the downstream senior appropriator plaintiffs to the beneficial use of 3,000,000 gallons of water per annum from Burro Creek, in accordance with the terms of plaintiffs' Certificate of Water Right.

6. The District Court erred in its ruling that the use of water from Burro Creek by the upstream junior appropriator defendant did not deprive the downstream senior appropriator plaintiffs of water at their point of diversion.

7. The District Court erred in its ruling that the admitted use by the upstream junior appropriator defendant of water from Burro Creek is not proved to be the reason for the lack of water at the downstream senior appropriator plaintiffs' point of diversion.

8. The District Court erred in its ruling in favor of the defendant and against the plaintiffs in that the matter of deprivation of water by the upstream junior appropriator defendant to the detriment of the downstream senior appropriator plaintiffs had already been adjudicated by the United States District Court for the District of Arizona (Cause No. Civ. 321—Prescott) and affirmed by the Circuit Court of Appeals for the Ninth Circuit (Cause No. 14248), 229 Fed. 2d page 920, entitled Bagdad Copper Corporation, a corporation, Appellant, vs. John Phillip Zannaras and J. P. Robinson, Jr., Co-partners, and U. S. Tungsten Corporation, Appellees, (the same parties involved herein), wherein ruling was made that the lack of water in Burro Creek for plaintiffs' use for 5 months of each year was caused by the upstream pumping by defendant.

9. The District Court erred in its ruling that the burden of proof was upon the downstream senior appropriator plaintiffs to show that the lack of water for plaintiffs' use was the result of the junior appropriator upstream defendant's pumping.

10. The District Court erred in ruling that the evidence adduced was insufficient to enable the Court to determine as a fact that the use of water by an upstream junior appropriator was the result of the injury to the downstream senior appropriator.

11. The District Court erred in ruling that the burden of proof is upon the downstream senior appropriator to prove as a fact that the cause of its injury was attributable to the admitted pumping operations by the upstream junior appropriator.

12. The District Court erred in ruling for the defendant when the District Court found that the evidence was insufficient to enable the Court to determine that the act of the upstream junior appropriator defendant resulted in the lack of water available for the downstream senior appropriator plaintiffs.

13. The District Court erred in ruling in favor of the defendant and against the plaintiffs in that such ruling is contrary to the weight of the evidence.

14. The District Court erred in ruling that the downstream senior appropriator plaintiffs are not entitled to an injunction against the upstream junior appropriator defendant.

15. The District Court erred in ruling that the plaintiffs are not entitled to an injunction against the defendant in that the denial is contrary to the findings and evidence on the file in the office of and testified to by the Arizona State Water Commissioner, an offi-

cial of the State of Arizona, charged by law with keeping records and making investigations.

16. The District Court erred in ruling against the plaintiffs and in favor of the defendant in that the burden of proof is upon one who changes its method and means of diversion to affirmatively show that such change in method and means of diversion will not damage downstream senior appropriator.

17. The District Court erred in denying relief to the plaintiffs when the defendant in its testimony asserted it was using large amount of water for purposes other than for its own mining operations.

18. The District Court erred in not granting the injunctive relief sought by the plaintiffs when the evidence clearly discloses that the diversions by defendant for 5 months each year is depriving the plaintiffs of water to which they are entitled.

19. The District Court erred in failing to find as a fact that the plaintiffs were the senior and the defendant the junior appropriators of waters of Burro Creek, as the evidence conclusively proved such to be true, and the priority had been previously adjudicated by the United States District Court for the District of Arizona (Cause No. Civ. 321—Prescott) and affirmed by the Circuit Court of Appeals for the Ninth Circuit (Cause No. 14248), 229 Fed. 2d page 920, entitled Bagdad Copper Corporation, a corporation, Appellant, vs. John Phillip Zannaras and J. P. Robinson, Jr., Co-partners, and U. S. Tungsten Corporation, Appellees, (the same parties involved herein.)

20. The District Court erred in not granting the injunctive relief sought by the downstream senior appropriator plaintiffs when the evidence clearly discloses that the amount of water used by the upstream junior

appropriator defendant exceeds the amount of water to which it claims to be entitled under its certificate of water right.

21. The District Court erred in failing to require the upstream junior appropriator to affirmatively and specifically plead and affirmatively prove by clear, convincing and satisfactory evidence that the admitted use of water by such upstream junior appropriator does not deprive the downstream senior appropriator of the amount of water to which it is entitled.

22. The District Court erred in denying the application of the downstream senior appropriator for injunctive relief against the upstream junior appropriator in that the effect of such denial deprives the downstream senior appropriator of property without due process of law and without the payment of just compensation therefor.

ARGUMENT

This argument is urged in support of Concise Statements of Points Number 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 14, 16, 21.

BURDEN OF PROOF

It is the position of Zannaras-Robinson that the burden of proof was upon Bagdad, as the upstream junior appropriator, to show by clear and convincing evidence that the admitted interception and diversion by Bagdad of some 1,100 acre feet (358,436,100 gallons) of water per year from Burro Creek did not affect the natural flow of the creek nor interfere with the right of Zannaras-Robinson as prior appropriators to use up to 3,000,000 gallons of water at their point of diversion.

In the well recognized work of Kinney on Irrigation and Water Rights, Second Edition, Vol. 3, Sec. 1640, page 3003, the following statement is found:

"Sec. 1640. Proof—Burden of Proof. In an action to enjoin the defendant from diverting water, or to prevent him from a continuous invasion of any of the plaintiff's alleged rights, it devolves upon the plaintiff, in the first instance, to establish a *prima facie* case to his right to the use of the water or other right in question, as set forth in the allegations of his complaint, and also the essentials necessary, such as irreparable injury to his rights, before the Court will grant the injunction prayed for.***"

And in the same section at page 3004:

"***But, as a general rule, upon the plaintiff making out a *prima facie* case, the burden is then cast upon the defendant to show that he is entitled to the water claimed by him in accordance with the allegations of his answer. ****So, where the defendant seeks to justify his acts in taking the water under the allegation that it will not reach the prior appropriator and plaintiff below, even if permitted to flow down the stream, and will, therefore, be of no use to him, not only is the burden of proof upon such defendant to show that fact, but the evidence must be most clear and convincing.****" (Emphasis supplied.)

In support of the last statement underscored above, the case of Alamosa etc. Co. v. Nelson 42 Colo. 140, 93 Pac. 1112 is cited in support thereof. On page 1115 of the Pacific Report the decision of the court is:

"Where a senior seeks to enjoin a junior appropriator of water from diverting the same to the injury of the former, and the junior appropriator seeks to avoid the same upon the ground that if the use which he threatens to make of it is restrained the owner of the senior right will derive no benefit, such a defense ought to be established by clear and satisfactory evi-

dence. The infringement of a prior by the owner of a junior right constitutes a legal injury, and, before the junior can justify his acts of interference with the prior right upon the ground stated, a strong showing should be made. Upon this controverted issue of fact which the defendants have set up in their affirmative defense the evidence was conflicting, and the defense was not established to the satisfaction of the trial court. On the contrary, the evidence was legally sufficient to uphold its finding in plaintiff's favor, and we cannot interfere with it." (Emphasis supplied.)

Vol. 93 Corpus Juris Secundum, Waters, Sec. 201a at page 1015, in discussing presumptions and burden of proof, contains the statement:

"****As against a prior appropriator, the adverse party may have the burden of proving that his storage or use of water does not interfere with the rights of the prior appropriator, as by proving that he has developed or is collecting, storing, or using water which, without his acts, would not reach the prior appropriator and be available to him under his appropriation.***"

and in support of this statement cites:

Allendale Irr. Co. v. State Water Conservation Board, 113 Mont. 436, 127 P. 2d 227, Irion v. Hyde, 110 Mont. 570, 105 P. 2d 666.

Silver King Consol. Mining Co. v. Sutton, 85 Utah 297, 39 P. 2d 682.

DeHaas v. Benesch, 116 Colo. 344, 181 P. 2d 453. 67 C.J. p. 1061 notes 25* and 26**

*Donich v. Johnson, 77 Mont. 229, 250 Pac. 963;

Peterson v. Wood, 71 Utah 77, 262 Pac. 828.

**Midway Irrigation Co. v. Snake Creek Mining & Tunnel Co. 271 F. 157 (Cert. granted 41 S. Ct. 536, 256 U. S. 687, 65 L Ed. 1172, and aff. 43 S. Ct. 215, 260 U. S. 596, 67 L. Ed. 423); Greely and Loveland

Irrigation Co. v. Huppe, 60 Colo. 535, 155 Pac. 386; Jackson v. Cowan, 33 Idaho 525, 196 Pac. 216; Spaulding v. Stone, 46 Mont. 483, 129 Pac. 327; Rasmussen v. Moroni Irr. Co. 56 Utah 140, 189 Pac. 572; Mountain Lake Mining Co. v. Midway Irr. Co., 47 Utah 346, 149 Pac. 929.

Finding of Fact No. 5 is: "The evidence is insufficient to enable the Court to determine whether the pumping by the defendant Bagdad Copper Corporation during seasons of scarcity has any bearing upon the failure of the water flowing past its point of diversion to reach the point of diversion of plaintiffs due to the high rate of evaporation and transpiration."

The trial court's judgment in Irion v. Hyde *supra* (second appeal 110 Mont. 570, 105 P. 2d 666) was reversed by the Supreme Court of Montana. At page 673 of 105 P. 2d the court in its opinion stated;

"18. In its sixth finding the court found that the evidence was insufficient to determine what volume of water at the defendants' premises would be necessary to reach plaintiffs' diversion in any useful quantity. Not only is that finding true, but the facts above recited indicate that no such evidence can possibly be given due to the four indeterminate and indeterminable variables mentioned above. We must, therefore, sustain appellants' objection to the further finding, added by the court about two months after the original findings and conclusions, to the effect that 'either party may, upon notice to the other, apply to the court for a further hearing to fix definitely what volume of water is necessary at defendants' premises to reach the point of diversion of the plaintiffs in any useful quantity.'

"The evidence does disclose, however, that there may at times be conditions, such as empty pot holes, dry stream bed, and rainfall principally or entirely above defendants' dam and not long continued in character, under which it may be demonstrable that storage or

diversion by defendants may not be the proximate cause of plaintiffs' failure to receive water. *In such instances defendants have both the burden and the privilege of showing the facts; but it seems obvious that no general rule can be devised 'to fix definitely what volume of water is necessary at defendants' premises' to reach plaintiffs' ditch.*" (Emphasis supplied.)

As an additional ground for reversing the trial court the Supreme Court of Montana on the same page 673 of 105 P. 2d states:

"(15-17) *It is well settled that a subsequent appropriator attempting to justify his diversion has the burden of proving that it does not injure prior appropriators.* Donich v. Johnson, 77 Mont. 229, 250 P. 963. *Certainly here the defendants have not sustained that burden.* It is apparent that they have not proved and cannot prove that their diversion would not in any case harm the plaintiffs simply by evidence as to the amount of flow of volume of water at defendants' dam or at a point a mile and a half below it. The only possible proof of such non-interference would be evidence, (1) *that in spite of defendants' diversion there is actually available at the plaintiffs' point of diversion all the water for which they then have a beneficial use up to the limit of their appropriation;* or (2) *that if insufficient water is available there defendants' storage or diversion of water did not contribute to that result.* Not only have the defendants failed to prove non-interference with plaintiffs' prior right, but the evidence shows affirmatively that there has been such interference and that it is still continuing.

"*There is no question that one of the paramount needs of the semi-arid states is the conservation of water. However, it is not conserved by permitting a later appropriator utterly to destroy a prior appropriation for the irrigation of some 130 acres by an appropriation to irrigate approximately 30 acres.*" *** (Emphasis supplied.)

An early Idaho case (1904), *Moe et al v. Harger et al*, 10 Idaho 302, 77 Pac. 645, involved the same type of situation—injunction and defense that water if not diverted would not reach prior downstream appropriator. In its opinion upholding and affirming the trial court, which decided in favor of the prior appropriator and overruling the defense of the defendant, stated at page 647:

“****Where prior appropriators have diverted the amount of water to which they are entitled, and, for example, say 100 inches, to which the next appropriator is entitled, is left in the stream, and a settler above diverts a part or all of the remaining water, the presumption must at once arise that such diversion will be to the injury and damage of the appropriator entitled thereto.

So soon as the prior appropriation and right of use is established, it is clear, as a proposition of law, that the claimant is entitled to have sufficient of the unappropriated waters flow down to his point of diversion to supply his right, and an injunction against interference therewith is proper protective relief to be granted. *The subsequent appropriator, who claims that such diversion will not injure the prior appropriator below him, should be required to establish that fact by clear and convincing evidence.*****

This case was cited with approval in *Silkey v. Tiegs*, (Idaho 1934) 28 P. 2 1037, 1038. And then too on page 646 of the Pacific Report is the following:

“****This Court has uniformly adhered to the principle, announced both in the Constitution and by the statute, that the first appropriator has the first right; and it would take more than a theory, and in fact clear and convincing evidence, in any given case, showing that the prior appropriator would not be injured or affected by the diversion of a subsequent appropriator, before we would depart from a rule so just and equitable in its application, and so gen-

erally and uniformly applied by the courts. Theories neither create nor produce water, and when the volume of a stream is diverted, and 75 percent of it never returns to the stream, it is pretty clear that not exceeding 25 percent of it will ever reach the settler and appropriator down the stream, and below the point of diversion by the prior user.***"

In the case just cited "experts" had theorized that water used by the upstream junior appropriator would not affect the amount of water available to the downstream prior appropriator. In the case now on appeal the "experts" theorized, in the face of concrete evidence to the contrary, that if Bagdad did not use the water above, it would not reach Zannaras-Robinson. The Idaho court's statement that "theories neither create nor produce water" is an apt expression.

The case of Neil v. Hyde (Idaho 1919) 186 Pac. 710, involved the burden of proof required when a junior appropriator claims that water used would not, if allowed to flow downstream, reach the prior appropriator. At page 713 on rehearing, the court stated:

"If neither the surface nor underflow, if undisturbed, would reach the point of diversion of the prior appropriator, his flow would not be diminished by the diversion of water above him by a junior appropriator, and he could not complain. *The burden rested upon appellants to show that neither the surface nor underflow, if uninterrupted, would reach the point of diversion of respondent, the senior appropriator.*"

The presumption in this case on appeal is that all water intercepted and diverted will decrease the flow of the creek. The office of this presumption is to give rise to the rule and cast the burden of proof under such circumstances, on the one intercepting and diverting the flow to show that such interception and diversion does not encroach upon prior appropriators.

In this case it is contended by Zannaras-Robinson that the District Court in its tentative order of January 3, 1951 (R. 10-12) and in the judgment of April 17, 1957 (32-35) based upon certain Findings of Fact and Conclusions of Law, conclusively shows that the Trial Court completely ignored, in the preliminary order, to take into consideration the fact that Zannaras-Robinson were the prior appropriators, and that, in the final judgment again not only failed to recognize the priority of Zannaras-Robinson but also failed to recognize the decision in Civil Cause No. 321, affirmed by this Appellate Court and mandated to the District Court, adjudicating the water rights of the parties.

As a result of such failure, the District Court then erroneously further failed to place the burden of proof upon Bagdad and to require Bagdad to prove by clear and convincing evidence that its admitted pumping operations and use did not interfere with the prior rights of Zannaras-Robinson. The judgment should therefore be reversed.

The judgment of January 2, 1951 was based upon erroneous findings of fact, resulted in an erroneous conclusion and erroneous judgment.

RES JUDICATA

THIS ARGUMENT IS DIRECTED TO CONCISE STATEMENTS OF POINTS NUMBER 6, 8 and 18

“Briefly stated, the doctrine of res judicata is that an existing final judgment rendered upon the merits, without fraud or collusion, by a court of competent jurisdiction, is conclusive of rights, questions, and facts in issue, as to the parties and their privies, in all other actions in the same or any other judicial tribunal of concurrent jurisdiction.” 30 Am. Jur., Judgments, Sec. 161, page 908. See also 30 Am. Jur.,

Judgments, Secs. 165, pages 910-912, and Sec. 172, pages 914-917, and Sec. 179, pages 923, 924.

In support of the above citations from American Jurisprudence the following cases are cited:

The Haytian Republic (United States v. The Haytian Republic) 154 US 118, 38 L ed 930, 14 S Ct 992;

Dowell v. Applegate, 152 US 327, L ed 463, 14 S Ct 611;

Beloit v. Morgan, 7 Wall. (US) 619, 19 L ed 205;

Young v. Black, 7 Cranch (US) 565, 3 L ed 440;

Lawrence v. Vernon (CC) 3 Sumn 20, Fed Cas No. 8, 146;

Hay v. Salisbury, 92 Fla. 446, 109 So 617, citing RCL;

Healy v. Moore, — Mo App —, 100 SW 2d, 601 citing RCL;

White v. Ladd, 41 Or 324, 68 P 739, 93 Am St Rep 732;

Howard v. Huron, 5 SD 539, 59 NW 833, 26 LRA 493;

Alderson v. Horse Creek Coal Land Co. 81 W Va 411, 94 SE 716, citing RCL.

Anno: 11 L ed 1059.

and the 1957 Cumulative Supplement adds to the above citations that of Ripley vs. Storer, 309 NY 506, 132 NE 2d 87, motion den 309 NY 976, 132 NE 2d 335.

Volume 50 C.J.S. Judgments, Section 682, page 128-133, contains a discussion of this principle.

Several hundred cases are cited in support thereof. So as not to burden the Court with all of these, however, the following Arizona cases are cited:

In re Sullivan's Estate, 51 Ariz. 483, 78 P 2d 132, 135;

Stewart vs. Phoenix Nat. Bk. 49 Ariz. 34, 64 P 2d 101;

Miller vs. Kearnes, 45 Ariz. 548, 46 P 2d 638, 640.

Another well reasoned case carrying out the above principles and also holding that the inquiry of res judicata is not limited to the mere formal judgment but extends to the pleadings, the verdict, or the findings, and that the scope and meaning of the judgment is often determined by the pleadings, verdict or findings, is:

Cressler vs. Brown et al (Okla. 1920) 192 P. 417.

It is also the contention of the Appellants that the matter of deprivation of water was passed upon and decided by the District Court (and affirmed by this Appellate Court) in Civil Cause No. 321 and cannot be relitigated in the present action. In support of this principle are the following cases:

Boland vs. Nihlros et ux (Utah 1932) 10 P 2d 930;

Jeremy Fuel & Grain Co. vs. Mellen, 50 Utah 49, 165 P. 791;

Price et al vs. Clement (Okla. 1940) 102 P 2d 595;

Sutphin vs. Speik (Calif. 1940) 99 P 2d 652;

Sutphin vs. Speik (Calif. 1940) 101 P 2d 497 (Rehearing);

Yates vs. Kuhl (Calif. 1955) 279 P 2d 563;

Joyce vs. Murphy Land & Irrigation Co., Limited, et al (Idaho 1922) 208 P. 241;

Goodeagle vs. Moore 89 Okla. 211, 214 P. 725;

State ex rel Barnett, Bank Comr. vs. Wood, 171 Okla. 341, 43 P 2d 136;

Bennett vs. City of Salem, 235 P. 2d 772;

Neil vs. Hyde et al. (Idaho 1919) 186 P. 710.

The case of Bennett vs. City of Salem (Oregon) supra contains a rather complete discussion of the matter of res judicata. Syllabus No. 5 thereto is:

"If second action involves a right, title or interest as to which the judgment on the first action is a conclusive adjudication, the estoppel must extend to every matter which might have been urged to sustain or defeat that right, title or interest even if the second action is different."

On the basis of that case the judgment in Civil Cause No. 321 and its unanimous affirmance by this Appellate Court precluded the relitigation of the water rights of the parties hereto and the deprivation of water and the right of Zannaras-Robinson to take water from Burro Creek without interference by Bagdad. Further, the judgment in Civil Cause No. 321 acted as an estoppel as against all matters urged by Bagdad to defeat the rights of Zannaras-Robinson appearing on the record in Civil Cause No. 321, No. 14248 in this Court.

The same principle will be hereinafter discussed as applying also to the Rule of the Law of the Case.

It will be noted that the judgment dated November 12, 1953 (14248 R. 41-43) adjudged the validity and quieted the title of the water rights of the parties, holding that Zannaras-Robinson were the downstream prior and Bagdad the junior upstream appropriators, and as such senior appropriators Zannaras-Robinson were entitled to take water from Burro Creek without interference from Bagdad. The judgment was based on several findings, one of which was that for approximately five months in each year, due mainly to Bagdad's pumping operations and use of water above, there was no water at the Zannaras-Robinson point of diversion. (14248 R. 37-40)

Another question which arises is that of whether the Court could (after the entry of the judgment on Civil Cause No. 321 on November 12, 1953) hear Bagdad at the trial March 9-11, 1954 in its presentation of expert

testimony, based upon hypothetical assumptions, attempt to show that its pumping and use of the entire supply of the creek during the summer months was the use of water which would never reach the Zannaras-Robinson point of diversion.

It will be recalled that at the 1949 trial Bagdad claimed there was plenty of water in the creek for both diversions. At the 1952 trial Bagdad changed its position and claimed the lack of water at the Zannaras-Robinson point of diversion was due to natural causes. This 1952 trial was the consolidated trial of this cause of action and Civil Cause No. 321. Then at the 1954 trial Bagdad again changed its position and produced expert witnesses to attempt to prove by calculations based upon the hypothetical assumptions that when Bagdad pumps all the water out of the creek during the summer and a part of the fall months as the evidence and the Government water gauges show that it does, then this pumping and use will not affect the water downstream at the Zannaras-Robinson diversion point, because if the water was left in the stream it would have been lost by evaporation and evapo-transpiration before reaching the Zannaras-Robinson diversion point.

The judgment in Civil Cause No. 321 was appealed by Bagdad. During the pendency of the appeal, Zannaras-Robinson filed a motion for further hearing based upon the fact that Civil Cause No. 321 adjudicated and quieted the water priorities and rights of the parties, determined that Zannaras-Robinson were entitled to the use of water from Burro Creek without interference from Bagdad, and the judgment was based on the findings of fact that "For approximately five (5) months in each year, due mainly to plaintiff's (Bagdad's) pumping operation and use of water above, there was no water at the defendants' (Zannaras-Rob-

inson's) point of diversion." This motion was denied by minute entry November 23, 1953 (R. 644) "subject to renewal in the spring."

December 5, 1953 Zannaras-Robinson filed a Renewal of Motion to Set for Further Hearing and Affidavit in Support Thereof. Seven points were set forth as grounds for the granting of this motion. (R. 23-27).

Paraphrased they are:

That at the termination of the hearing the Court had announced that it desired evidence in order to determine the character of judgment to be entered in favor of Zannaras-Robinson;

That Zannaras-Robinson were under the impression that the Court had actually determined that they were entitled to a judgment and the character of judgment was the only matter to be determined;

That the decision of the Court in Civil Cause No. 321 (heretofore alluded to involving the same water rights, deprivation and parties) had been determined in favor of Zannaras-Robinson and was then on appeal to the United States Court of Appeals for the Ninth Circuit, but that the appeal did not operate as a stay of execution; that Zannaras-Robinson were entitled to a judgment in accordance with the evidence, enjoining Bagdad from using Zannaras-Robinson water;

That the evidence clearly showed that for five months each year Zannaras-Robinson were deprived of water by reason of Bagdad's pumping; and Zannaras-Robinson could not economically operate on an on and off basis;

That Zannaras-Robinson were desirous of immediately adding to their milling facilities involving the expenditure of some \$40,000, but that it was necessary to have assurance by the entry of a favorable decree in order that they would be assured of a continuous water supply;

That Zannaras-Robinson were negotiating with the owners of the Old Dick Mine for milling additional ore and that the contract would of necessity be of several years' duration and required sufficient water for running their mill continuously without interruption;

That the decision in this case does not have to await the action of the Appellate Court on Civil Cause No. 321, then on appeal.

Without objection by Bagdad, this renewed motion to set cause for hearing was granted (R. 645), and hearing held March 9-11, 1954, which was at the time Civil Cause No. 321 was yet pending on appeal.

Instead of evidence being introduced by Bagdad for the purpose of determining at this hearing the character of judgment to be entered in accordance with the motion and the Court's decision in Civil Cause No. 321, the matter of the deprivation of water was relitigated. In the final analysis then we have in this judgment on appeal a judgment overruling in effect the Trial Court's opinion based on the same issues and facts. The judgment now being appealed was rendered April 17, 1957, after the former judgment's affirmance and final determination by this Appellate Court.

The effect of affirmance is discussed in 3 Am. Jur. Appeal and Error, Sec. 1166, page 677, 8 in part as follows:

"It may be stated generally that a judgment of affirmance is a determination by the appellate court that the proceeding under review is free from prejudicial error. Such action ends the case in the appellate court and deprives such court of all power to add to, or alter, the record as certified, by rescinding the order of affirmance and dismissing the appeal. All questions raised by the assignments of error and all questions that might have been so raised are to be regarded as finally adjudicated against the appell-

lant or plaintiff in error, and the judgment affirmed must be regarded as free from all error, even though errors were present which were not raised by the assignment of error and the record contains defects not discovered until after the judgment had been affirmed and the petition for rehearing denied."

The principle that a fact or question which was actually and directly in issue in a former suit, and was there judicially passed upon and determined by a court of competent jurisdiction, is conclusively settled by the judgment therein, so far as concerns the parties to that action, and persons in privity with them, and cannot be again litigated in any future action between such parties or privies, in the same court, or in any other court of concurrent jurisdiction, upon the same or different cause of action is discussed in:

Price et al vs. Clement (Okla. 1940) 102 P 2d 595;

Goodeagle vs. Moore 89 Okla. 211, 214 P. 725;

United Tire & Inv. Co. vs. Hines, Okl. Sup. 96 P 2d 1047;

Morehouse vs. City of Everett (Wash. 1926) 252 P. 157;

Johnson vs. Gillett, 66 Okl. 308, 168 P. 1031;

Comanche Ice & Fuel Co. vs. Binder & Hillery, 70 Okl. 28, 172 P. 629;

Adams et al vs. State ex rel Motherseed Bank Com'r. 133 Okl. 194, 271 P. 946;

McKee, Ex'x. vs. Producers' & Refiners' Corp. et al 170 Okl. 559, 41 P 2d 466.

The Price et al vs. Clement case supra quotes with approval from syllabus 2 of State ex rel Barnett, Bank Com'r. vs. Wood, 171 Okl. 341, 43 P. 2d 136, as follows:

"When a fact has been determined in the course of a judicial proceeding and a final judgment has been rendered in accordance therewith, it cannot be again

litigated between the same parties without virtually impeaching the correctness of the former decision, which, from motives of public policy, the law does not permit to be done.***"

In the instant case we have the judgment in Civil Cause No. 321 possessing the following characteristics:

Final judgment

Rendered without fraud or collusion

Rendered on the merits

Rendered by a court of competent jurisdiction, in fact the same court

Rendered between the same parties

Involving the same water rights

Involving deprivation of water

being the issues in the instant case, and having been finally adjudicated (and affirmed by this Appellate Court) in Civil Cause No. 321, the matter is now Res Judicata, and was Res Judicata at the time of the entry of the judgment on April 17, 1957.

This Argument is urged in support of Concise Statements of Points Number 8, 1 and 15.

AFFIRMANCE BY APPELLATE COURT LAW OF THE CASE

The doctrine of the law of the case clearly applies to questions of law actually presented and determined upon a former appeal or error proceeding as essential to its just disposition. Likewise, matters necessarily involved in the determination of a question are settled by the decision when the same are again presented on a subsequent appeal. So, the decision upon a prior appeal is conclusive where the conclusion declared could not have been reached without either expressly or impliedly deciding such questions. 3 Am. Jur. Appeal and Error, Sec. 994, page 549.

The general rule, supported by the great weight of authority, is to the effect that questions which might have been, but were not, raised or presented on a prior appeal, or error proceeding, will not be considered on a subsequent appeal, or error proceeding—in other words, that where the prior judgment was on the merits, nothing is before the court on a subsequent appeal except the proceedings subsequent to the first mandate, all matters occurring prior thereto and which could have been adjudicated on the former hearing being regarded as controlled by the law of the case rule. 3 Am. Jur. Appeal and Error, Sec. 995, page 549.

It may be stated generally that a court of review is precluded from agitating questions which were propounded, considered and decided on a previous review. The decisions agree that as a general rule, when an appellate court passes upon a question, the question there settled becomes the "law of the case" upon a subsequent appeal. 3 Am. Jur., Appeal and Error, Sec. 985.

When the reviewing court, upon the consideration of the first appeal, leaves none of the points and issues disposed of to be retried after the mandate, there is of course an added reason for considering all decisions (including findings and conclusions) on the first appeal as constituting the Law of the Case, and therefore conclusive upon the second appeal. 3 Am. Jur. Appeal and Error, Sec. 985.

The Law of the Case is applicable to separate cases involving the same facts and issues which have been previously determined on appeal.

The point of application of the Law of the Case to a decision in another case and not only to the subsequent appeal of the same case is discussed in 5 C.J.S. Appeal and Error, Section 1964, page 1499, 1501. It cites in

support of the proposition, Tally vs. Ganahl 151 Cal. 418, 90 P. 1049.

Other cases recognizing that the Law of the Case may be applied to separate and distinct cases are:

Portland Trust Co. vs. Coulter, 23 Or. 131, 31 Pac. 280;

Hawley vs. Smith, 45 Ind. 183;

Wilkes vs. Davies, 8 Wash. 112, 35 Pac. 611, 23 L.R.A. 103;

Norwood vs. Eastern Oregon Land Co. (Oregon 1931) 5 P. 2d 1057;

Wilkes vs. Davies, (Wash. 1894) 35 P. 611;

Farmers' State Bank & Clayton Nat. Bk. (New Mexico 1925) 245 P. 543.

In the case of Portland Trust Co. et al vs. Coulter et al supra, after determining that the Law of the Case was applicable to a separate case, the Court then discussed an argument advanced that in spite of invoking the Rule of the Case, the judgment should be different in the case then on appeal. In discussing this point, the Court said at Page 281 of the Pacific Report:

“If this was an open question on this appeal, in view of counsel's argument, we might feel induced to carefully re-examine the question, *but the law is well settled that a decision of this court upon a point distinctly made becomes in all subsequent proceedings between the same parties, concerning the same subject-matter, and upon the same facts, the law of the case by which we are bound*, whatever our views might be upon an original consideration of the matter. Wells, Res Adj. c 44. ‘A previous ruling by the appellate court upon a point distinctly made,’ says Mr. Chief Justice FIELD, ‘may be only authority in other cases, to be followed and affirmed, or to be modified or overruled, according to its intrinsic merits, but, in the case in which it is made, it is more

than authority; it is a final adjudication, from the consequences of which the court cannot depart, nor the parties relieve themselves.' *Phelan v. San Francisco*, 20 Cal. 39.' (Emphasis supplied)

This case also quotes with approval from *Stacy Railroad Co.* 32 Vt. 552, where the question, "will this court revise a former decision made by the same court in the same cause, and on substantially the same state of facts" by stating that to ignore the former decision and change it when appealed again "would lead to incalculable mischief." It then continues with the statement that, "If all questions that have ever been determined by this court are to be regarded as still open for discussion and revision in the same cause, there would be no end to their litigation, until the abilities of the parties or the ingenuity of their counsel was exhausted."

This same *Portland Trust Co.* case *supra* also cites with approval from *Bridge Co. vs. Stewart*, 3 How. 413, and points out at Page 281 of the Pacific Report that:

"****Although the question (involved in *Bridge vs. Stewart*) was the important one of jurisdiction, it was, notwithstanding, held that the former decision of the Court in the same case was conclusive of the rights of the parties, and could not be reconsidered upon a second appeal; such an appeal bringing under review only the proceedings of the circuit court subsequent to the mandate." (Bracketed words within quote supplied);

and cites the following cases as being to the same effect:

- Davidson vs. Dallas, 15 Cal. 75;
- Kibler vs. Bridges, 5 S. C. 335;
- Huffman vs. State, 30 Ala. 532;
- Hawley vs. Smith, 45 Ind. 183;
- Parker vs. Pomeroy, 2 Wis. 84;
- Page vs. Fowler, 37 Cal. 100;
- Thomson vs. Albert, 15 Md. 268.

In this same Portland Trust Co. case supra, the Court continues at Page 282 of the Pacific Report with:

"It is the points distinctly presented and decided which become the law of the case, and the reasons or want of reasons for the decision are of no consequence on this appeal. The effect of the decision in Coulter v. Portland Trust Co. is that the deed from Mrs. Palmer, as attorney in fact for her husband, to W. G. Jenne is void, and did not convey the title, and we have no alternative but to assume that all the reasons urged for a contrary conclusion were duly considered by the court, and adhere to that decision on this appeal."

Vol. 3 Am. Jur. Appeal and Error, Section 531, page 194, discusses the divestiture of jurisdiction of the District Court over the subject matter being appealed. The first sentence is:

"An appeal or error proceeding divests the trial court of jurisdiction over matters necessarily involved in the review proceeding only."

(Citing White vs. White ,106 Pa. Super. Ct. 85, 161 A. 464)

Vol. 3 Am. Jur. Appeal and Error, Section 1234, page 730, 731 discusses the duty of the trial court to comply with the mandate of the appellate court. In part the discussion is:

"After a case has been determined by the reviewing court and remanded to the trial court, the duty of the latter is to comply with the mandate of the former. The mandate of the reviewing court is binding on the lower court and must be strictly followed and carried into effect according to its true intent and meaning, as determined by the directions given by such reviewing court. Public interest requires that litigation shall come to an end speedily, so that when a cause has been tried to judgment, and the merits

of the trial determined upon appeal, the trial court upon remittitur, has no power but to obey the judgment of the appellate court. It may, by various methods, be compelled to comply with that mandate; and if it misconstrues the direction of the reviewing court, does not give full effect to its mandate, or enters a judgment or decree which is not in conformity thereto, a new review is appropriate. Proceedings contrary to the mandate must be treated as null and void.***"

Applying the principle of the Law of the Case to this case on appeal, we find that the question of the rights of the parties, including the priority right of Zannaras-Robinson to take water from Burro Creek without interference by Bagdad and deprivation of water by Bagdad, were expressly presented to this Court in Civil Cause No. 321, and affirmed by this Appellate Court in Appeal No. 14248, reported in 229 F 2d 920.

The points relied upon by Bagdad in its appeal are set forth in 14248 R. 433-436.

It will be seen that the very issues on this appeal, i.e. rights and priorities of the parties, including the priority right of Zannaras-Robinson to take water from Burro Creek without interference by Bagdad, and deprivation of water by Bagdad were previously expressly before this Appellate Court. In addition, these issues were argued in the briefs on that appeal and a final judgment on these issues rendered, and then unanimously affirmed by this Appellate Court. As a matter of fact, the Complaint filed by Bagdad in Civil Cause No. 321 was by reference incorporated in and made a part of Bagdad's Answer to the Zannaras-Robinson Amended Petition for Relief, and Bagdad prayed for the same relief in this case as it sought in Civil Cause No. 321. (R. 22, 23)

In addition, at the commencement of the consolidated trial of Civil Causes No. 221 and 321 on May 13, 1952, the Court said: (14248 R. 52)

“The Court: Why not consolidate? It is all the same issue.”

Also, Bagdad in its reply brief (P. 3) in this Court in the appeal of Civil Cause No. 321 (14248 on appeal) argued that Cause No. 321 was brought in an attempt to defeat Civil Cause 221, this cause now on appeal.

By invoking the rule of the Law of the Case on this appeal, the District Court was bound by the mandate of this Appellate Court, which mandate is dated March 2, 1956. Under the rule of the Law of the Case the District Court was bound to follow that mandate and was precluded from considering any matter occurring prior to the date of the mandate.

By the terms of the judgment here on appeal the District Court nullified, impeached, reversed and overruled the former judgment and misconstrued and failed to carry out the mandate of this Appellate Court.

A fortiori the Law of the Case being applicable herein the decision of April 17, 1957 must be reversed and there is no necessity for even considering all of the additional points of error.

This argument is urged in support of Concise Statement of Points Number 2, 3, 4, 5, 8, 9, 10, 11, 12, 14 and 18.

PRIMA FACIE CASE

In the Zannaras-Robinson Renewal of Motion to set for further hearing filed December 5, 1953, the adjudication in Civil Cause No. 321 was pled. Without objection from Bagdad the matter was set. At that time the Court had before it the evidence theretofore taken on

March 3 and 4, 1949 (R. 38-346), and the evidence theretofore taken on May 13 and 14, 1952 (14248 R. 51-368). Additional evidence was then taken March 9 and 10, 1954. (R. 347-636). This latter evidence was taken at a time subsequent to the entry of the findings of fact, conclusions of law and judgment of the United States District Court for the District of Arizona in Civil Cause No. 321, dated November 12, 1953 (14248 R. 37-43), which judgment was then on appeal to this Court, being assigned by this Court Cause Number 14248. The judgment was affirmed by this Appellate Court on January 30, 1956, 229 F 2d 920.

For the purpose of the further hearing on March 9 and 10, 1954, proceedings were based on the fact that Zannaras-Robinson had a valid decreed water right. The attorney for Bagdad at the commencement of and before any witnesses were heard said:

"In that connection, I want to briefly call your Honor's attention to this: If we assume that Mr. Zannaras has a valid water right, which, for the purpose of this proceeding, we must, his water right is for 3 million gallons per year." (R. 352)

Therefore it was distinctly understood and admitted at the 1954 hearing that there was a judicially decreed right in Zannaras-Robinson for the use of water from Burro Creek.

In addition, the judgment in Civil Cause No. 321 (Appeal No. 14248) decreed that Zannaras-Robinson were entitled as prior appropriators to take water from Burro Creek without interference from Bagdad. Such judgment was based upon several findings of fact, among them being the finding that for approximately five months each year, due mainly to Bagdad's pumping operations and use of water above, there was no water at the Zannaras-Robinson point of diversion.

The finding and judgment was based upon evidence taken at the consolidated trial of this case and Civil Cause No. 321. It was not only before the same Judge in the same Court, but the evidence was taken at the same hearing.

Zannaras-Robinson presented their Certificate of Water Right and put on evidence showing the lack of water at their point of diversion, showed no other speedy and adequate remedy at law. Bagdad in its pleadings and all of its evidence admitted it was pumping water the year around from Burro Creek and that in the summer months it was pumping all the available water from Burro Creek. At this point Zannaras-Robinson had established a *prima facie* case. Having established a *prima facie* case, the burden was upon Bagdad to show by clear and satisfactory evidence that its admitted excessive pumping and use of water did not affect the flow of water at the Zannaras-Robinson point of diversion.

The effect of the failure of Bagdad to establish an affirmative defense by clear and satisfactory evidence has been covered in the argument entitled Burden of Proof. In order that we will not unnecessarily burden the Court we are content to only point out a few citations.

Medano Ditch Co. v. Adams, 29 Colo. 317, 68 Pac. 431, 435.

Kinney on Irrigation and Water Rights, Second Edition, Section 1628, Vol. 3, page 2974, sets forth very succinctly the matter of making a *prima facie* case when the priority has been judicially decreed.

Additional citations on this point are set forth in the Argument on the Burden of Proof.

Bagdad did not, until the 1954 hearing, ever urge in the record that water would not reach the Zannaras-Robinson point of diversion if Bagdad would not pump and use any water during the summer months. Irrespective of this fact, we find that in Bagdad's reply brief (P. 6) in the former appeal of No. 14248, filed with this Appellate Court in July of 1954, (after the March 1954 hearing on this case by the District Court), that the Albion-Idaho Land Co. vs. NAF Irr. Co., 97 F 2d 439 was urged upon this Appellate Court as grounds for reversing that judgment, which judgment was based on the same facts and issues involved in this case on appeal and, in fact, evidence adduced at the consolidated trial. By the affirmance of that case the application of the principle was found inapplicable to the controversy between these parties. In spite of this the Trial Court based the judgment in the present case on a case this Appellate Court had already rejected as authority.

While we feel that we have disposed of the Albion-Idaho case *supra*, it should be pointed out that there are other reasons that it is not analogous to the present case.

The Albion-Idaho case *supra* was an injunctive action by lower appropriators against upper appropriators, both of whom claimed to be prior appropriators. They were residents of different states. The lower appropriators sought the appointment of a water master to administer the waters. Certain decrees adjudicating water rights, to which decrees the present parties were not parties, and a decree whereby a court in one state purportedly adjudicated rights in another state, were set up as the basis for establishing adjudicated rights. The matter was heard by the trial court and it concluded that the evidence was not sufficient for it to

determine whether water would reach the lower appropriator even if not used by the upper appropriator. The judge thereupon, with the consent of the parties, appointed a water master, who put on gauges and checked the flow of the stream for more than three years and then made a report to the Court. A very elaborate injunction was then granted, setting limits upon the times when the upper users must let the water down according to the water gauges, and established a formula for determining the times when the upper appropriators need not let water down, predicated on the fact found by the Court that the water if let down the creek would not reach the lower appropriators during certain times. This fact was based on actual accurate measurements of water gauges installed by the Commissioners.

The case went to the Appellate Court on a statement of the evidence, with the record not containing the evidence in full. Of course when the Appellate Court does not have the entire record before it such appellate court will presume any conceivable state of facts within the scope of the pleadings and not inconsistent with the record which will sustain the decision below. The Appellate Court so ruled.

So far as the decrees were concerned, since the present parties were not parties or privies to the parties to those decrees, the decrees were not binding on the present parties. And the decree purporting to Adjudicate water rights in another state was beyond the Court's jurisdiction. The Appellate Court so ruled.

The main point at issue after determining from the agreed statement of the evidence and the facts obtained by the Commissioners appointed with the consent of both parties, was when and how much water should be

let down by the upper junior appropriator in order that water so released would be available for the lower appropriator's use.

It is to be noted that the burden of proof was not involved in the Albion-Idaho case. It was submitted on a statement of evidence and the entire evidentiary record was not before the Appellate Court.

It was not an adjudication case (as it had no jurisdiction to adjudicate priorities), and there was no former decree. We have in the case now on appeal a case between the same parties, covering the same issues of rights of the parties, including the decreed right of Zannaras-Robinson to use water from Burro Creek without interference by Bagdad and the deprivation of water by Bagdad. This Appellate Court affirmed that judgment in Cause No. 14248.

In this case on appeal, Zannaras-Robinson having presented to the Trial Court a prima facie case, and Bagdad having failed to carry the burden of proof, (not only as shown by the evidence but as shown by the Court's Memorandum, Findings of Fact and Conclusion), as to its admitted pumping and use of water not interfering with Zannaras-Robinson's prior rights, the Trial Court should have granted the injunction.

This Argument is urged in support of Concise Statement of Point No. 16.

CHANGE OF METHOD AND MEANS OF DIVERSION

The Certificate of Water Right obtained by Bagdad from the State Land Commissioner of the State of Arizona was introduced in evidence both in the 1949 trial and in the consolidated trial in 1952. It is Ex. L-1 of the 1949 trial and is Ex. J of the 1952 trial. (14248 R. 397-400)

The Certificate of Water Right contains the following condition: (14248 R. 399)

"The right to the use of water aforesaid hereby confirmed is restricted to the lands or place of use herein described, and subject to all prior existing rights."

It is the contention of Zannaras-Robinson that the certificate precluded Bagdad from changing its method and means of diversion, which change resulted in depriving Zannaras-Robinson of Water which formerly returned to the stream and also increased the quantity of Bagdad's use. It is also contended that the burden is upon the appropriator changing the method and means of use to show that such change does not damage another appropriator, whether he be a prior or subsequent appropriator.

The Bagdad Certificate of Water Right heretofore referred to was issued by the State of Arizona April 12, 1944. Mr. Dickie became manager of Bagdad in September 1944 (R. 172)

On direct examination Mr. Dickie testified as follows: (R. 172-175)

"Q. After you came to the Bagdad in September, 1944, Mr. Dickey, I think you rearranged the disposal of tailings, is that correct? A. Yes, sir.

"Q. And likewise, rearranged to some extent the method of securing water for mining, is that right?

"A. Well, you might state it that way, if I may be allowed to explain. The prior management, in designing the plant and the disposal of tailings, installed a large seven-inch trestle line three and one-half miles downstream and ran the tailings from the mill to that point and stored them on the bank of Boulder Creek. It was a costly operation to keep the pipeline maintained, to keep it from breaking down, also there wasn't a chance of reclaiming any water. At that time we were interested in reclaiming all the mill

water possible, because there wasn't any saving in re-agents at the same time other than in having to pump water from Burro Creek seven and one-half miles. Therefore, we began construction of a tailings pond right at the millsite within twelve or fifteen hundred feet, and from that date on we have continued to store our tailings right at the property at the millsite."

* * *

And continued:

"Q. In placing of that dam across Moroney Gulch, you call it? A. Yes.

"Q. Approximately what amount of material was moved in there? A. Two million yards.

"Q...And it was approximately that time when you started to make this change that you heard from Mr. Zannaras? Is that right? A. Yes.

* * *

"Q. The way you have that arrangement there, I believe, Mr. Dickey, the tailings now are run directly from the mill and are dammed behind this dam?

"A. Yes, sir.

"Q. What do you then use the water for?

"A. We use the water over and over in the mill for our milling operations.

"Q. You mean that the tailings are such that you can pump water back out and use it in your mill there?

"A. As the tailings go into the dam, they go in there with approximately 30 per cent solids, the balance being water, and after it sets in the pond awhile, the tailings settle and it leaves clear water for us to use over again.

"Q. In other words, you keep circulating your water which is supplemented by fresh water from Burro Creek, is that right? A. Correct, sir."

This circumstance was argued in Appellates' opening brief (P. 9) in Appeal Cause No. 14248.

From Mr. Dickie's testimony the following indisputable facts appear to be true:

After September first 1944 and after the issuance of the Bagdad Certificate of Water Right (being dated April 12, 1944 Ex. J 14248 R. 397), Mr. Dickie rearranged the method of securing water for mining purposes, thereby reclaiming water which previously returned to Boulder Creek and hence to Burro Creek, below Bagdad's point of diversion and above the Zannaras-Robinson point of diversion downstream, both on Burro Creek.

Mr. Dickie gave accurate figures of the amount of water that was returning to the creek. He said that Bagdad was milling 3,000 tons of ore per day, (R. 171) prior to the time the change was made, and that in order to have the tailings flow the 3½ miles downstream to the bank of Boulder Creek, Bagdad had to put water in with the finely ground tailings to make it contain 30% solids and 70% water (R. 175).

Multiplying 7,000 tons of water put in the tailings daily by 365 days a year we find that this amounts to 2,550,000 tons of water which was returning to the creek, and since there are 240 gallons of water per ton, the amount of water returning to the creek amounted to 612,000,000 gallons of water. However, since about 3% of the ore was retained as copper concentrates, the amount of water reclaimed by Bagdad under the changed condition will amount to approximately 500,-000,000 gallons of water now being reclaimed which is not, as formerly, returned to the stream.

The fact that Bagdad originally pumped out of Burro Creek a large amount of water and then later by changing its method of use stopped its return to the creek is shown in the record from the cross-examination of

Mr. C. H. W. Smith, Engineer for the Arizona State Land Department: (R. 325, 326)

“Mr. Cox: I will ask you if, under date of March 15th, 1944, the Bagdad Corporation gave a notice of complete application of water to beneficial uses, showing 600,000,000 — using 600,000,000 gallons of water per annum?

“Mr. Wilmer: I object to that as being immaterial, since that was in '44. We are here concerned with '48.

“Mr. Cox: Mr. Dickey testified there has been no material change in the amount of - - -

“Mr. Wilmer: Mr. Dickey didn't testify to any such thing at all. They put in their tailing pond since then.

“Mr. Cox: They had some pumps since then, but he said they had some pumps - - -

“Mr. Wilmer: I object on the ground it is immaterial what might appear in the proof of appropriation in 1944.

“The Court: It may be received.

“Mr. Cox: There was that record furnished to your office by the Bagdad Corporation, was there not?

“A. Yes.”

It is therefore established by this testimony that Bagdad filed a proof of appropriation, a statement under oath, that Bagdad pumped from Burro Creek 600,000,000 gallons of water prior to March 15, 1944. Of this amount pumped, approximately 500,000,000 gallons each year was returned with the tailings to the creek.

At that time Bagdad had a pump on Burro Creek with a rated capacity of 750 gallons per minute or a rated yearly capacity of 394,200,000 gallons of water, besides the other point of diversion on Boulder Creek as shown on Bagdad's Certificate of Water Right (14248 R. 397), that is, that they had the capacity to

do so in 1944 when Bagdad filed its proof of appropriation for 600,000,000 gallons of water. According to the testimony of Mr. Dickey as to the procedure, about 500,000,000 gallons of water was returning to the stream. As a result, the water at the Zannaras-Robinson point of diversion was polluted from 1943 up until the time the change was made. The pollution proves that the water returned to the creek by Bagdad reached the Zannaras-Robinson point and is substantiated by the judgment rendered in Civil Cause No. 129. The judgment awarded Zannaras-Robinson of \$1,000 for damages for such pollution and enjoined continued pollution. (14248 R. 431, 432)

Ex. 13 (14248 R. 369, 370) sets forth in letter form an exchange of correspondence between the parties looking toward the entry of judgment in Civil Cause No. 129. The result of this change in method of diversion resulted in removing the pollution and *at the same time drying up the creek.*

It should be noted that when Bagdad objected to the introduction of evidence as to the conditions existing at the time of the issuance of the Certificate of Water Right in 1944, stating, "**** that was in '44. We are here concerned with '48" (R. 326) Bagdad thereby ignored the fact that these conditions were material issues in cases when changes in method of diversion take place after the issuance of a Certificate of Water Right, in that such changes are prohibited when they will interfere with existing rights or increase the use of water. The Court recognized this when this evidence of the Engineer for the State was admitted over Bagdad's objection.

Where it is claimed that the change in method of diversion does not increase the amount of use, the burden of proof is upon the one who changes the method

of diversion and use to show that such change will not interfere with vested rights.

In this case now on appeal, evidence by Bagdad admitted the change in method of diversion and use. It then set forth in detail that the purpose of the change was so that the water could be reclaimed and used and reused. It then devolved upon Bagdad to establish that such change would not interfere with vested existing rights.

The following cases are urged in support thereof:

Mannix & Wilson et al vs. Thrasher, et al. (Mont. 1933) 26 P 2d 373;

Gassert vs. Noyes et al. 18 Mont. 216, 44 P. 958;

Farmers Highline Canal & Reservoir Co. et al. vs. City of Golden et al. (Colo. 1954) 272 P 2d 629;

Enlarged Southside Irrigation Ditch Co. vs. John's Flood Ditch Co. 116 Colo. 580, 183 P 2d 552;

Van Tassel Real Estate & Live Stock Co. vs. City of Cheyenne et al. (Wyo. 1936) 54 P. 2d 906;

Tudor vs. Jaca et al. (Ore. 1946) 165 P 2d 770.

The cases cited above also consistently hold that any change in method of diversion and use which injures other appropriators is prohibited, without making a new application therefor. Such application for additional appropriation being subject to other rights existing at that time.

If for no other reason than that the evidence conclusively showed the increased use by change in method of diversion and use, the Trial Court erred in not granting the injunction to Zannaras-Robinson.

This Argument is urged in support of Concise Statement of Point No. 20.

ADMITTED USE OF MORE WATER
THAN ENTITLED TO USE UNDER
CERTIFICATE OF WATER RIGHT

Exhibit J. (14248 R. 397) is the Bagdad Certificate of Water Right dated April 12, 1944, fixing the priority date of November 5, 1941, stating in part that Bagdad's use is limited as follows: (14248 R. 398)

"****is limited to an amount actually beneficially used for said purposes, and shall not exceed Three Hundred Fifteen Million Three Hundred Sixty Thousand (315,360,000) Gallons Per Annum."

The principle that an appropriator may not use water in excess of the amount of his certificated right applies to all appropriators, irrespective of their priority.

This is forcefully brought out even as regards a prior appropriator in the following:

Kinney on Irrigation and Water Rights, Second Edition, Vol. 2, Sec. 784, page 1366, citing:

Tudor vs. Jaca et al. (Ore. 1946) 165 P 2d 770.

To the same effect is:

Farmer's Highline Canal & Reservoir Co. et al vs. City of Golden et al. (Colo. 1954) 272 P 2d 629.

At the 1954 trial Dr. Heinrich Theil testified that Bagdad in the year 1953 took from the stream 1,100 acre feet of water. (R. 471) This amounts to 358,436,-100 gallons of water. This is contrasted to Bagdad's Certificate of Water Right to the effect that its use shall not exceed 315,360,000 gallons per annum. The same capacity pump was used from 1943 through 1953. (R. 577)

On the basis of the admitted use by Bagdad of water to the extent of some 43,076,000 gallons per annum in excess of the amount allowed by its water right cer-

tificate, the Trial Court erred in not granting to Zannaras-Robinson the injunctive relief for which they prayed.

This Argument is urged in support of Concise Statement of Point No. 17.

USE OF WATER FOR PURPOSES OTHER THAN ITS OWN MINING OPERATIONS

Exhibit J of the 1952 trial is the same as Exhibit L-1 of the 1949 trial. (14248 R. 397-400) It is the Certificate of Water Right issued to Bagdad by the State of Arizona. The certificate contained therein a limitation as follows: (Ex. J, 14248 R. 398)

"****that the amount of water to which such right is entitled and hereby confirmed, for the purposes aforesaid, is limited to an amount actually beneficially used***"

Then follows a description of the lands owned by Bagdad.

At the 1949 trial cross-examination of Mr. Ernest R. Dickey, elicited the following: (R. 221, 222)

"Q. I believe you stated yesterday that you were using around 100,000 gallons per day for domestic purposes? A. Yes, sir.

"Q. Now, is that for the Bagdad employees?

"A. Anyone that lives there; everyone.

"Q. And there are other mining camps, miners from other mining camps also living at Bagdad?

"A. Yes, sir.

"Q. Hillside miners live at Bagdad? "A. Yes, sir.

"Q. Is there any charge made to the Hillside mine or to the miners for the water? A. No, sir.

"Q. Is the Hillside Mine a part of the Bagdad operations? A. No, sir.

"Q. The water is used for landscaping and gardening also at Bagdad? A. Yes, sir.

"Q. I believe you stated that they had—that you used approximately four to five thousand gallons per day of fresh water in your milling?

"A. Yes, sir.

"Q. Now, in your domestic water do you include the gardens in your computation of that?

"A. Yes.

"Q. Are there any other mining claims or mines that there are miners also living at Bagdad and you furnish water to? A. Yes, sir.

"Q. Which others?

"A. Goodwin's Mining Company No. 2 Mines.

"Q. Are those near there? A. Yes, sir.
And further: (R. 226)

"Q. Is there any water taken from Bagdad to the Goodwin property? A. Yes.

"Q. How much water is taken over there?

"A. I have no idea.

"Q. What is it taken over there for?

"A. Drilling purposes, mining purposes and cooling engines, and so forth.

"Q. In other words, the Bagdad, the water that they are using from Burro Creek is also being used for the Goodwin property in the development there?

"A. Correct."

This evidence clearly proves by Bagdad's own evidence that Bagdad is using water in violation of its Certificate of Water Right by passing on a portion of water which it is taking from Burro Creek to other mining companies.

A right of appropriation does not carry with it any right to sell or give it to others, thereby depriving a prior appropriator (even subsequent appropriators) of their right to use the same. Creek vs. Bozeman Waterworks Co. 15 Mont. 121, 38 P. 459.

To the same effect:

Hague vs. Nephi Irr. Co. 16 Utah 421, 52 P. 765;

Manning et al. vs. Fife et al. 17 Utah 232, 54 P. 111;

Enlarged Southside Irrigation Ditch Co. vs. John's Flood Ditch Co. 116 Colo. 580, 183 P 2d 552;

Farmers Highline Canal & R. Co. vs. City of Golden (Colo. 1954) 272 P. 2d 629.

It is evident that Bagdad is not only pumping approximately 43,076,000 gallons more than the limit of its Certificate of Water Right but that in addition it is selling or giving away water to other mining companies, mining camps and others, also contrary to law.

This is an action in equity, requiring equitable relief. The Trial Court in refusing to grant injunctive relief by enjoining Bagdad, in fact encourages Bagdad to continue its illegal activities, at the expense of vested rights of prior appropriators. The Trial Court erred in failing to grant the injunction as prayed by Zannaras-Robinson.

This Argument is urged in support of Concise Statements of Points No. 1, 8 and 15.

FINDINGS OF THE STATE ENGINEER ARE ENTITLED TO GREAT RESPECT AS REPRESENTING THE OPINION OF AN EXPERT UPON A MATTER WITHIN THE RANGE OF HIS SPECIAL KNOWLEDGE AND EXPERIENCE

The State Land Department in the State of Arizona is specifically given control and supervision of the

waters of the state and investigative powers, Arizona Revised Statutes, Sections 45-102 and 103.

At the 1952 consolidated trial of this cause and Civil Cause No. 321, Mr. C. H. W. Smith, the Engineer for the Water Department of the Arizona State Land Department, testified. (14248 R. 110) He stated that he had made an official investigation, in person, of the conditions at the Zannaras-Robinson point of diversion November 9, 1949 (14248 R. 110), and again on November 14, 1950 (14248 R. 116).

His direct and cross-examination cover pages 14248 R. 110-120. Briefly, he testified that on both of these occasions there was no water flowing at the Zannaras-Robinson diversion point, that the creek was dry with the exception of small pot holes, and that there was no water which could be pumped by Zannaras-Robinson at their point of diversion.

The Trial Court's Finding of Fact No. 2 is: (R. 33)

"2. Burro Creek is a seasonal stream, generally wasting away, or tending to waste away, during the months of June, July, August, and on occasion, September in each year, depending upon the rainfall on it (sic) watershed. During the remaining months of the year there is generally adequate water in Burro Creek for all claims of both plaintiffs and defendant."

Such a finding is in direct conflict with the official finding of Mr. C. H. W. Smith, the Engineer for the Arizona State Land Department, who testified that he went to the Zannaras-Robinson point of diversion on November 19, 1949 and November 14, 1950, and that there was no water there on either occasion.

Great respect should be given to an official finding of a state engineer as representing the opinion of an expert upon a matter within the range of his special

knowledge. This principle is discussed, followed and the trial court's judgment reversed because of the trial court's failure to accord credence to a state engineer's official report in the following case:

In re Bassett Creek and its Tributaries in White Pine County, (Nev. 1945) 155 P 2d 324, citing as authority Barber Creek, 43 Nev. 403, 182 P. 925;

Scossa vs. Church, 46 Nev. 254, 205 P. 518, 210 P. 563; Deepwater Railway Co. vs. Honaker et al, 66 W. Va. 136, 66 SE 104, 27 L.R.A., N.S., 388, at p. 394.

To the same effect:

Smyth vs. Jenkins, (Ore. 1956) 299 P 2d 819.

Furthermore, at the same consolidated 1952 trial of this case and Civil Cause No. 321, Mr. Sherman O. Decker, Engineer in Charge, U. S. Geological Survey, Surface Water Division, testified. (14248 R. 128-130)

He testified that he went to the Zannaras-Robinson diversion point November 23, 1950 in his official capacity to locate a gauging site and to see what the flow conditions were. (14248 R. 129) He testified that there was no flow in the creek at the Zannaras-Robinson diversion point. (14248 R. 129) He also testified that plaintiffs' Ex. 5 consisting of 3 pictures showing the dry creek bed at the Zannaras-Robinson diversion point were taken while he was there. (14248 R. 129)

Evidently no consideration whatsoever was given to the testimony of this Engineer for the Surface Water Division of the U. S. Geological Survey as Finding of Fact No. 2 is in direct conflict with this definite testimony.

On the other hand, the testimony of both Mr. C. H. W. Smith, Engineer for the State Land Department and that of Mr. Sherman O. Decker, Engineer in Charge of the Surface Water Division of the U. S. Geological

Survey is in complete agreement with Finding of Fact No. III of the Judgment rendered by the same judge on the same evidence in Civil Cause No. 321, affirmed by this Appellate Court in No. 14248. (14248 R. 39) It will be recalled that the finding was that, "****For approximately five (5) months in each year, due mainly to plaintiff's (Bagdad's) pumping operations and use of water above, there was no water at the defendants' (Zannaras-Robinson) point of diversion." (Bracketed words within quote supplied (14248 R. 39).

The Court's finding being in direct conflict with the official finding of the water engineers, it follows that the Court's finding is in error. Therefore the judgment must be reversed.

This Argument is urged in support of Concise Statement of Point No. 13.

THE JUDGMENT IS CONTRARY TO THE WEIGHT OF THE EVIDENCE

It is the position of Zannaras-Robinson that the preliminary order, denying an injunction and retaining jurisdiction for the purpose of the entry of further orders should justice and equity so require, is contrary to the weight of the evidence and that the final judgment denying injunctive relief is contrary to the weight of the evidence.

The first trial was held March 3rd and 4th 1949. At this trial the evidence of Zannaras-Robinson was that there was insufficient water in Burro Creek during certain portions of the year, due to the pumping and use by Bagdad above, for Zannaras-Robinson to carry on mining and milling activities. Bagdad's defense was that although it was pumping and using large amounts of water, there was plenty of water in the stream for Zannaras-Robinson at all times. It produced witnesses

A. D. Lon Adams, George H. Davis, Ernest R. Dickey, Ernest George Green and C. S. Staggs, all of whom testified as to there being lots of water in Burro Creek throughout the entire year, and in the summer months in particular. All of the Zannaras-Robinson witnesses, John P. Robinson, Jr., Arthur J. Seeds, C. A. Thompson and John Phillip Zannaras testified that there was no water at the Zannaras-Robinson diversion point during certain periods of the year, and that because of the illegal diversions and drying up of the creek Zannaras-Robinson could not carry on the mining, milling and development of their properties.

At this same 1949 trial Bagdad introduced Ex. N. (R. 339-343) which was an application filed by Bagdad March 24, 1939 (which was prior to the time Zannaras-Robinson or Bagdad were using any water from the creek) with the then State Water Commissioner, including a permit to commence actual construction of diversion works looking to the issuance of a Certificate of Water Right. The application proposed the diversion and use of 105,120,000 gallons of water per year. In answer to a question as to the names of the then users and the quantity available, Bagdad stated on its application: (R. 342)

“Answer to 20, above: The Old Neal Ranch, about 2 miles below the proposed point of diversion has used water from Burro Creek for irrigation purposes on a small amount of cultivated land. *This water is but a small part of that flowing, even in the dry season. The minimum flow is approximately 1,000 gpm and the Neal Ranch use will not exceed 75 gpm.* For the above reason we believe that there is now in excess of 200 gpm subject to appropriation.” Emphasis supplied.

It is to be noted that in 1939, prior to the time either Zannaras-Robinson or Bagdad were using any water

from Burro Creek, that Bagdad filed a sworn statement with the State authority that there was a minimum flow in Burro Creek of approximately 1,000 gallons per minute, even in the dry season, which is contrary to the findings of the District Court that Burro Creek is a seasonal creek wasting away in the summer months.

The State Water Commissioner then issued a permit to construct diversion works on May 5, 1939, but limited the amount, which might ripen into a certificate, to 100,000,000 gallons. (R. 343) Which clearly shows that the State Water Commissioner did not consider that there was 105,000,000 gallons available. This application and permit was not perfected by Bagdad and did not ripen into a valid appropriation.

The January 2, 1951 findings of fact, conclusion and judgment were based on evidence by Bagdad that there was at all times sufficient water in Burro Creek for both the uses of Zannaras-Robinson and Bagdad. The finding in the judgment of April 17, 1957 is directly contrary to the former. In 1957 the Court makes a finding that Burro Creek is a seasonal stream generally wasting away during the summer months.

At the 1952 trial evidence was taken, at the same hearing, on this case and on Civil Cause No. 321. That the preliminary judgment theretofore entered was not a final determination is shown by the statements by the Trial Judge in connection with the discussion of consolidation for trial when he said, "It is all the same issue," (14248 R. 52) and, "There is no original record. We are still trying 221. The Court held it in abeyance." (14248 R. 55)

At the 1952 consolidated trial Bagdad reversed its position and said that although it was pumping large

amounts of water, the lack of water at the Zannaras-Robinson point of diversion was due to natural causes. It then produced numerous witnesses. Zannaras-Robinson again showed through witnesses and photographs the lack of water.

On the basis of the evidence taken at the consolidated trial Judgment was rendered in Civil Cause No. 321, this was appealed to this Appellate Court (14248) and affirmed as reported in 229 F 2d 920. It is worthy of note that all of the evidence taken at the consolidated trial in 1952 is contained in the record of 14248 as filed with this Court. And the judgment, findings and conclusion which were affirmed by this Appellate Court, found that the shortage at the Zannaras-Robinson diversion point for five months of each year was mainly due to Bagdad's pumping and use of water above and that Zannaras-Robinson were entitled to use the amount of water adjudicated without interference from Bagdad.

It is inconceivable that the same evidence could result in contrary and conflicting judgments, especially when it is realized that the second judgment was not rendered until after the affirmance and mandate as to the former judgment.

The Bureau of Reclamation water gauge installed at the Bagdad sump measures all of the water going out of the sump down the creek *after Bagdad has pumped all of the water it wants.*

The Gauge readings were introduced at the consolidated 1952 trial for the period March through December 1949, January through December 1950, and January through August 1951, and appear as Ex. 1 of the record, printed as a separate booklet.

Mr. Dickie, Bagdad's General Manager explained the gauge readings (14248 R. 57-60). These readings show the amount of water flowing out of Bagdad's pond on Burro Creek after Bagdad pumped out water at the rate of five hundred to seven hundred gallons per minute. When the gauge reading is .0, Bagdad is pumping all the water from the creek and allowing no water to pass its pond. When the gauge reading shows the figure, for example of .25 this amounts to a discharge of 224 gallons per minute (Ex. D. 14248 R. 373). This explanation of the conversion of the gauge reading to gallons per minute was testified to by Mr. Roland F. Kaser of the Bureau of Reclamation (R. 243-245).

Printed as Appendix A of this Brief is a table containing the gauge readings converted into gallons per minute as taken from Ex. D, and also showing the total discharge of water for each month in acre feet.

Dr. Heimrich J. Thiel, a witness for Bagdad at the 1954 trial, testified that in June 1953 Bagdad pumped water from the Bagdad sump on Burro Creek at the rate of a minimum of 520 gallons per minute, (R. 454) and that from June 1952 to February 1953 at the average of 707 gallons per minute (R. 454).

Mr. Ernest R. Dickie, the General Manager for Bagdad testified at the 1954 trial that "since late in 1943, Bagdad has been pumping from the stream at its present point with a 700 capacity gallon pump" (R. 577).

Dr. Thiel also testified that during 1953 Bagdad pumped from Burro Creek at its sump 1,100 acre feet of water (R. 471) which amounts to 358,436,100 gallons of water.

Applying the pumping capacities and rate of pumping, as testified, in order to pump 358,436,100 gallons in one year the pumps must work continuously 24 hours

a day for 361 days of the year. Which clearly indicates that Burro Creek is a continuously running creek all through the year. It also shows that Bagdad diverts at least 520 gallons per minute in the summer months and at least 700 gallons per minute the rest of the year. So, when the gauge reading shows zero for June 25, 1949 until September 9, 1949 it indicates that Bagdad was pumping, for this two and a half month period, water out of the creek at the approximate rate of at least 520 gallons per minute, while no water was let down for Zannaras-Robinson.

From September 22 until September 26, 1949, the reading is zero; and from October 1 until October 19, 1949 the reading is zero. Showing that practically the same condition existed up to this time.

It should also be noted that when the reading is not zero but shows, for example, a gauge reading of .10 which corresponds to 89 gallons per minute going downstream, that Bagdad has already taken at least 700 gallons per minute beforehand—this amounts to a very small percentage of the total flow being let down for Zannaras-Robinson. These gauge readings clearly show that even during days in May 1949 Bagdad pumped out close to 80% of the flow of the creek. The year 1950 is even worse as Bagdad pumped the entire flow even during the first half of November and approximately 90% of the flow for the rest of November. As of December 5, 1950, approximately 80% of the flow was pumped out by Bagdad.

For 1951 the gauge readings show that commencing with May 28 until July 17 the reading was zero.

These gauge readings and the admitted pumping by Bagdad conclusively show that Burro Creek is a continuously running stream and completely supports the

finding of fact in Cause No. 321 that for approximately five months of each year due mainly to Bagdad's pumping operations and use above, there is no water at the Zannaras-Robinson diversion point, and conclusively shows the illegal interference by Bagdad with the natural flow of the creek, and also, as we will show, it interferes with the underflow and the natural bed of the creek.

Bagdad has excavated a pond fifteen feet deep below the natural bed of the creek in order to collect the water of Burro Creek during the summer months, and thereby pumps out the underflow in addition to the surface water. Mr. G. A. Kellis, the pump operator and caretaker at Bagdad's pumping station on Burro Creek testified to this condition (R. 279-283). This procedure was corroborated by the testimony of Bagdad's General Manager, Mr. Ernest R. Dickey ,14248 R. 284, 285).

That such interference with the natural bed of the stream and the underflow is prohibited, is discussed and is so held in the following cases:

Cole et al. vs. Richards Irrigation Co. et al. 27 Utah 205, 75 P. 376;

Loyning et al. vs. Rankin et al. (Mont. 1946) 165 P 2d 1006;

Carson et al. vs. Hayes et al. 39 Or. 97, 65 P. 814;

Willey et al. vs. Decker et al. 11 Wyo. 496, 75 P. 210.

The 1954 hearing was for the purpose of determining the form and wording of injunction against Bagdad in view of the Affirmance by this Appellate Court of the Trial Court's Decision in Civil Cause No. 321. This is shown by the Renewal of Motion to Set Cause for Hearing (R. 23-27). The motion was granted without objection by Bagdad (R. 645).

Instead, Bagdad at this point attempted to impeach and overrule the affirmed judgment in Civil Cause No. 321 by "expert testimony". While the expert testimony should have been excluded entirely we will attempt to show that the opinions of the experts were contradictory and that the opinions were not based upon personal knowledge.

A thorough discussion of the matter is found in Irion vs. Hyde, (Mont. 1940) 105 P 2d 666, 671, 672. It quotes with approval the case of Gallagher vs. Kelliher, 58 Ore. 557, 114 P 943, 944, 115 P. 596;

"A surveyor's opinion as to the result of the survey, unsupported by the details of the survey, both as to the data upon which it is based and the manner of reaching the result is not competent, but, when he gives the details of his work, it is a question of law whether his method was correct and a question of fact whether his result is correct." Citing Seabrook v. Coos Bay Ice Co., 49 Ore. 237, 89 P. 417.

Dr. Heinrich J. Thiel testified as to test holes to determine the amount of the underflow which he did not make but was told about (R. 443); he testified as to the depth of the water table and the change in the creek bed *as he had been informed* (R. 418); he testified as to the permeability factor being between one thousand and ninety thousand and in the same breath said, "We don't know anything exactly" (R. 403); he testified as to the slope of the water table based upon a survey made by someone else (R. 403); and he did not even know the width of the channel actually carrying the water but had to depend on a chart prepared by someone else.

Another expert allowed to testify was Mr. Herbert C. Fletcher, in charge of research, Watershed Management, of the U. S. Forest Service, who declared that

there was no practical method for determining how much water would be lost between the Bagdad sump and the Zannaras-Robinson point of diversion (R. 532, 533). This admission was a direct contradiction of the conclusion and opinion of Dr. Thiel, as well as an attack on the method used by Dr. Thiel in arriving at a contrary conclusion.

Proof that Dr. Thiel's calculations based upon certain hypotheses are incorrect is supported by the following question and answer: (R. 492, 493)

"Q. I will ask you this question: If you had before you definite evidence on the part of the plaintiff whom we are representing, or one of its witnesses, that from April through the fall of 1950 he always saw water, running at the Kingman Crossing, and that the flow of water there varied from a thousand gallons a minute to no lower than 200 gallons a minute, would that change your view that this water couldn't run down?

"A. No; it wouldn't change my view, because it is in part ground water that is coming out at the Kingman Crossing."

It is evident from the above testimony that according to the results of the theory, assumptions, and calculations employed by Dr. Heinrich J. Thiel, that the water of Burro Creek in the summer months if not intercepted by Bagdad and allowed to run down the creek not only could not reach the Zannaras-Robinson diversion point but would not even reach the Kingman Crossing, which is three miles upstream from the Zannaras-Robinson diversion point. Since this result is diametrically opposed to the undisputed facts presented by all of the Bagdad witnesses testifying in this matter (who testified there was at all times water at the Kingman Crossing) it follows that the method assumed and data employed by the expert Dr. Thiel are

incorrect and entitled to no credence. It also confirms Dr. Fletcher's statement that exact figures are impossible of ascertainment.

It appears that Dr. Thiel professes the famous principle that if the facts do not conform to the thesis, it is the facts and not the thesis that are to blame—and woe to those who point out the facts.

Mr. Dickey, the General Manager of Bagdad, testified at the 1954 trial that Bagdad is storing in a reservoir 325,000,000 gallons of water (R. 585-587). This water is stored illegally by Bagdad without a permit from the State of Arizona, in violation of Arizona Revised Statutes Sec. 45-109.

The judgment being contrary to the weight of the evidence should be reversed and the injunction granted to Zannaras-Robinson.

This Argument is urged in support of Concise Statement of Point No. 22.

A WATER RIGHT, BEING A PROPERTY RIGHT, CANNOT BE TAKEN WITHOUT DUE PROCESS OF LAW

Civil Cause No. 321, No. 14248 on appeal to this Appellate Court, determined the water rights of Zannaras-Robinson and decreed they were entitled to take water from Burro Creek without interference from Bagdad. The judgment in that case was based upon a finding that the lack of water at the Zannaras-Robinson point of diversion for approximately five months of each year was due mainly to the pumping operations and use of water above, by Bagdad.

Bagdad incorporated, by reference, its complaint in Civil Cause No. 321 in the answer it filed to the Zan-

naras-Robinson Amended Petition for Relief (R. 22) and also prayed for the same relief in this case as it prayed for in Civil Cause No. 321.

The District Court in the former judgment (affirmed by the Court) adjudicated the water rights according to the terms of the said rights; the application therefor and permit (14248 R. 13), the proof of appropriation (14248 R. 18) and certificate of water right (14248 R. 22), were all incorporated by reference and attached to the answer filed to Bagdad's complaint in Civil Cause No. 321.

The 1952 trial was a consolidated trial of the two cases. The issues, law and facts upon which the Court could act are so interrelated and interconnected that the two judgments must harmonize. As it stands at the present the judgment which was affirmed by this Appellate Court has been negated and overruled.

That a water right is a property right is so basic that we will not burden the Court on that point.

All these rights, questions and terms must rest as adjudicated and determined in Civil Cause No. 321; these rights, questions and terms being pled and cross-pled by the parties in these two cases, became res judicata. When the case was unanimously affirmed by this Appellate Court these rights, questions and terms became the Law of the Case, by which the District Court is bound.

Kinney on Irrigation and Water Rights, Second Edition, Vol. 2, Sec. 768, page 1327 states:

****A perfected water right is a vested property right and its value capable of estimation in money, and one which the law protects. A water right is such a property right that it comes clearly within the Constitutional provisions that property shall not be taken

or damaged for public or private use, except upon due process of law and upon just compensation.***..

In the present case it clearly appears that Zannaras-Robinson acquired a water right which was legally adjudicated by the District Court. The same District Court at the same consolidated trial on the same evidence then found that Bagdad was illegally taking water belonging to Zannaras-Robinson. Then the same District Court ruled in the present case that Bagdad was not taking water belonging to Zannaras-Robinson.

This amounts to the taking of property without due process of law in violation of both the State and Federal Constitutions.

THIS ARGUMENT IS DIRECTED TO CONCISE STATEMENT OF POINT No. 19

One of the points in issue was the water rights of the parties—Zannaras-Robinson claiming priority and Bagdad claiming priority to waters. In such instances the Court must determine relative priorities.

Kinney on Irrigation and Water Rights, 2d Ed. Vol. 3, Section 1601, page 2913, citing Platte Valley Irr. Co. v. Buckers, etc., 25 Colo. 77, 53 Pac. 334; Carlson v. City of Helena, 43 Mont. 1, 114 Pac. 110.

The Supreme Court of the State of Arizona has recognized water rights as property rights and subject to quieting under the statutes relative to quieting title to real estate. See

Salt River Valley Water Users Assn. v. Norveil, 29 Ariz. 360, 241 Pac. 503, rehearing denied 29 Ariz. 499, 242 P. 1013; Daggs v. Howard Sheep Company, 16 Ariz. 283, 145 P. 140.

Platte Valley Irr. Co. v. Buckers, supra, is a case wherein it was held that in an injunctive action the Court must first determine priority. To the same effect

Logan, Hyde Park & Smithfield Canal Co. v. Logan City, 72 Utah 221, 269 P. 776; Davies v. Angelo, 8 Cal. App. 305, 96 Pac. 909; Haight v. Tryon, 112 Cal. 4, 44 Pac. 318; and Cloverdale v. Smith, 128 Cal. 230, 60 Pac. 851.

While on appeal the appellate court may ordinarily presume that the trial court made a determination of the relative priorities of the parties in rendering its judgment denying an injunction, this presumption is not tenable when the statement of the trial judge is that he made no such determination. (14248 R. 54). Cash vs. Thornton, 3 Colo. App. 475, 34 P. 268.

That the matter of the relative rights of the parties is a material issue cannot be successfully refuted. If for no other reason it is material in order to make a determination as to the party upon whom the burden of proof rests. The Court erred in failing to make a determination of the relative rights of the parties and the judgment should be reversed.

CONCLUSION

Bagdad's illegal acts in changing its method of use of water thereby recapturing, storing and reusing water formerly returned to the creek, interfering with the natural flow, underflow and the natural bed of the creek, using water for purposes other than its own mining operations by giving water to other mining companies, using more water than allowed by its Certificate of Water Right, depriving Zannaras-Robinson of water, and drying up the creek, having been established, the District Court should have recognized the Zannaras-Robinson rights on Burro Creek, Boulder Creek and its tributaries established and affirmed by this Appellate Court in Civil Cause No. 321 (thereby giving effect

to the mandate of this Appellate Court), the District Court should have enjoined the above mentioned illegal acts. The failure to properly apply the Rules of the Law of the Case and Res Judicata, failure to properly place the burden of proof upon Bagdad, and determining the judgment contrary to the weight of the evidence, results in the taking of property without due process of law, in violation of both the State and Federal Constitutions.

This case now having been before the Courts for approximately nine years, equity requires that the judgment of the District Court be reversed with directions to enter judgment for Zannaras-Robinson as prayed, in accordance with instructions of this Appellate Court.

Respectfully submitted,

MOEUR & JONES
By Anthony O. Jones
Anthony O. Jones
Attorneys for Appellants
416 Security Building
Phoenix, Arizona

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1949 March		1949 April		1949 May	
	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.
1	3.90	525131	.60	6283	.30	1077
2	2.90	228905	.65	7180	.30	1077
3	3.40	354578	.65	7180	.30	1077
4	3.60	417413	.80	9874	.30	1077
5	4.00	561040	1.30	26929	.30	1077
6	3.60	417413	1.30	26929	.30	1077
7	3.30	327648	.80	9874	.30	1077
8	3.20	300718	.80	9874	.30	1077
9	2.50	157091	.70	8078	.30	1077
10	2.70	192997	.70	8078	.30	1077
11	3.20	300718	.60	6283	.30	1077
12	3.00	246858	.60	6283	.30	1077
13	1.90	78995	.60	6283	.30	1077
14	1.50	35907	.60	6283	.20	179
15	1.40	31417	.60	6283	.20	179
16	1.50	35907	.50	4488	.30	1077
17	1.40	31417	.50	4488	.30	1077
18	1.30	26929	.50	4488	.30	1077
19	1.30	26929	.50	4488	.30	1077
20	1.30	26929	.50	4488	.40	2782
21	1.20	22441	.50	4488	.40	2782
22	1.20	22441	.40	2782	.30	1077
23	1.10	17953	.40	2782	.30	1077
24	.90	11669	.30	2077	.30	1077
25	.60	6283	.30	1077	.20	179
26	.70	8078	.30	1077	.20	179
27	.60	6283	.30	1077	.20	179
28	.60	6283	.30	1077	.20	179
29	.60	6283	.30	1077	.20	179
30	.60	6283	.30	1077	.20	179
31	.60	6283			.20	179
		4445200		191725		28715

$$\text{acre-feet per month} \quad \frac{4445200 \times 60 \times 24}{325851} = 19635.2 \quad \frac{191725 \times 60 \times 24}{325851} = 846.8 \quad \frac{28715 \times 60 \times 24}{325851} = 126.8$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1949 June		1949 July		1949 August	
	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.
1	.10	89	.0	0	.0	0
2	.10	89	.0	0	.0	0
3	.10	89	.0	0	.0	0
4	.10	89	.0	0	.0	0
5	.10	89	.0	0	.0	0
6	.20	179	.0	0	.0	0
7	.30	1077	.0	0	.0	0
8	.30	1077	.0	0	.0	0
9	.30	1077	.0	0	.0	0
10	.30	1077	.0	0	.0	0
11	.30	1077	.0	0	.0	0
12	.30	1077	.0	0	.0	0
13	.30	1077	.0	0	.0	0
14	.30	1077	.0	0	.0	0
15	.30	1077	.0	0	.0	0
16	.30	1077	.0	0	.0	0
17	.30	1077	.0	0	.0	0
18	.20	179	.0	0	.0	0
19	.20	179	.0	0	.0	0
20	.20	179	.0	0	.0	0
21	.20	179	.0	0	.0	0
22	.20	179	.0	0	.0	0
23	.20	179	.0	0	.0	0
24	.20	179	.0	0	.0	0
25	.0	0	.0	0	.0	0
26	.0	0	.0	0	.0	0
27	.0	0	.0	0	.0	0
28	.0	0	.0	0	.0	0
29	.0	0	.0	0	.0	0
30	.0	0	.0	0	.0	0
31			.0	0	.0	0
	13724			0		0
Acre-feet per month	$13724 \times 60 \times 24 = 60.6$			0		0
	$\frac{325851}{}$					

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1949 September		1949 October		1949 November	
	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.
1	.0	0	.0	0	.30	1077
2	.0	0	.0	0	.30	1077
3	.0	0	.0	0	.30	1077
4	.0	0	.0	0	.30	1077
5	.0	0	.0	0	.30	1077
6	.0	0	.0	0	.30	1077
7	.0	0	.0	0	.30	1077
8	.0	0	.0	0	.30	1077
9	.0	0	.0	0	.30	1077
10	.30	1077	.0	0	.40	2782
11	.30	1077	.0	0	.40	2782
12	.30	1077	.0	0	.40	2782
13	.20	179	.0	0	.40	2782
14	.20	179	.0	0	.40	2782
15	.20	179	.0	0	.40	2782
16	.20	179	.0	0	.40	2782
17	.20	179	.0	0	.40	2782
18	.20	179	.0	0	.40	2782
19	.20	179	.0	0	.40	2782
20	.10	89	.30	1077	.40	2782
21	.10	89	.30	1077	.40	2782
22	.0	0	.30	1077	.30	1077
23	.0	0	.30	1077	.40	2782
24	.0	0	.30	1077	.40	2782
25	.0	0	.30	1077	.30	1077
26	.0	0	.30	1077	.30	1077
27	.20	179	.30	1077	.30	1077
28	.20	179	.30	1077	.30	1077
29	.20	179	.30	1077	.30	1077
30	.10	89	.30	1077	.40	2782
31	.10	89	.30	1077		
		5377		12924		57885

$$\text{Acre-feet per month} = \frac{5377 \times 60 \times 24}{325851} = 23.7 \quad \frac{12924 \times 60 \times 24}{325851} = 57.0 \quad \frac{57885 \times 60 \times 24}{325851} = 255.7$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1949		1950		1950		
	February	Gauge Read.	January	Gallons per min.	December	Gallons per min.	
1	.30	1077	.40	2782	.50	4488	
2	.30	1077	.40	2782	.50	4488	
3	.30	1077	.50	4488	.50	4488	
4	.40	2782	.50	4488	.50	4488	
5	.40	2782	.40	2782	.50	4488	
6	.40	2782	.40	2782	.50	4488	
7	.40	2782	.40	2782	.40	2782	
8	.40	2782	.40	2782	.40	2782	
9	.40	2782	.40	2782	.50	4488	
10	.50	4488	.40	2782	.50	4488	
11	.50	4488	.40	2782	.50	4488	
12	.50	4488	.40	2782	.50	4488	
13	.50	4488	.40	2782	.40	2782	
14	.50	4488	.40	2782	.40	2782	
15	.50	4488	.40	2782	.40	2782	
16	.50	4488	.40	2782	.40	2782	
17	.50	4488	.40	2782	.40	2782	
18	.50	4488	.40	2782	.40	2782	
19	.50	4488	.40	2782	.40	2782	
20	.50	4488	.40	2782	.40	2782	
21	.50	4488	.40	2782	.40	2782	
22	.50	4488	.40	2782	.40	2782	
23	.40	2782	.40	2782	.40	2782	
24	.40	2782	.40	2782	.30	1077	
25	.40	2782	.40	2782	.30	1077	
26	.40	2782	.40	2782	.40	2782	
27	.40	2782	.40	2782	.40	2782	
28	.40	2782	.50	4488	.50	4488	
29	.40	2782	.50	4488			
30	.40	2782	.50	4488			
31	.40	2782	.50	4488			
		103305		96478		93252	
Acre-feet per month		103305x60x24 325851	= 456.3	96478x60x24 325851	= 423.1	93252x60x24 325851	= 411.9

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1950 March		1950 April		1950 May	
	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.
1	.50	4488	.40	2782	.20	179
2	.50	4488	.40	2782	.20	179
3	.50	4488	.40	2782	.20	179
4	.50	4488	.40	2782	.20	179
5	.50	4488	.40	2782	.20	179
6	.40	2782	.40	2782	.20	179
7	.40	2782	.40	2782	.20	179
8	.40	2782	.40	2782	.20	179
9	.40	2782	.40	2782	.20	179
10	.40	2782	.40	2782	.20	179
11	.40	2782	.40	2782	.20	179
12	.40	2782	.40	2782	.20	179
13	.40	2782			.20	179
14	.40	2782			.20	179
15	.40	2782	.40	2782	.15	134
16	.40	2782	.30	1077	.15	134
17	.30	1077	.30	1077	.15	134
18	.30	1077	.30	1077	.15	134
19	.30	1077	.30	1077	.15	134
20	.30	1077	.30	1077	.15	134
21	.30	1077	.30	1077	.15	134
22	.30	1077	.30	1077	.15	134
23	.30	1077	.20	179	.10	89
24	.30	1077	.20	179	.10	89
25	.45	3635	.20	179	.10	89
26	.45	3635	.20	179	.10	89
27	.45	3635	.20	179	.10	89
28	.45	3635	.20	179	.10	89
29	.45	3635	.20	179	.10	89
30	.45	3635	.20	179	.10	89
31	.40	2782			.10	89
		86250		45137		4379

$$\text{Acre-feet per month} = \frac{86250 \times 60 \times 24}{325851} = 380.9 \quad \frac{45137 \times 60 \times 24}{325851} = 199.3 \quad \frac{4379 \times 60 \times 24}{325851} = 19.3$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1950 June		1950 July		1950 August	
	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.
1	.0	0	.0	0	.20	179
2	.0	0	.0	0	.20	179
3	.0	0	.0	0	.20	179
4	.0	0	.0	0	.20	179
5	.0	0	.0	0	.30	1077
6	.0	0	.0	0	.20	179
7	.0	0	.0	0	.20	179
8	.0	0	.10	89	.20	179
9	.0	0	.10	89	.20	179
10	.0	0	.10	89	.20	179
11	.0	0	.10	89	.20	179
12	.0	0	.0	0	.20	179
13	.0	0	.0	0	.10	89
14	.0	0	.0	0	.10	89
15	.0	0	.0	0	.10	89
16	.0	0	.0	0	.10	89
17	.0	0	.0	0	.10	89
18	.0	0	.0	0	.0	0
19	.0	0	.0	0	.0	0
20	.0	0	.0	0	.0	0
21	.0	0	.0	0	.0	0
22	.0	0	.0	0	.0	0
23	.0	0	.0	0	.0	0
24	.0	0	.50	4488	.10	89
25	.0	0	.50	4488	.10	89
26	.0	0	.40	2782	.10	89
27	.0	0	.30	1077	.10	89
28	.0	0	.30	1077	.0	0
29	.0	0	.20	179	.0	0
30	.0	0	.20	179	.0	0
31	.0	0	.20	179	.0	0
				14805		3847

Acre-feet
per month

$$\frac{14805 \times 60 \times 24}{325851} = 65.3$$

$$\frac{3847 \times 60 \times 24}{325851} = 16.9$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1950		1950		1950	
	September	Gauge Read.	October	Gauge Read.	November	Gauge Read.
1	.0	0	.10	89	.0	0
2	.0	0	.10	89	.0	0
3	.0	0	.10	89	.0	0
4	.0	0	.10	89	.0	0
5	.10	89	.10	89	.0	0
6	.20	179	.10	89	.0	0
7	.50	4488	.10	89	.0	0
8	.65	7180	.10	89	.0	0
9	.50	4488	.10	89	.0	0
10	.30	1077	.10	89	.0	0
11	.30	1077	.10	89	.0	0
12	.30	1077	.10	89	.0	0
13	.10	89	.10	89	.0	0
14	.10	89	.10	89	.0	0
15	.10	89	.0	0	.0	0
16	.10	89	.0	0	.0	0
17	.10	89	.0	0	.0	0
18	.10	89	.0	0	.0	0
19	.10	89	.0	0	.10	89
20	.10	89	.0	0	.10	89
21	.10	89	.0	0	.10	89
22	.10	89	.0	0	.10	89
23	.10	89	.0	0	.10	89
24	.10	89	.0	0	.10	89
25	.10	89	.0	0	.10	89
26	.10	89	.0	0	.10	89
27	.10	89	.0	0	.10	89
28	.10	89	.0	0	.10	89
29	.10	89	.0	0	.10	89
30	.10	89	.0	0	.10	89
31			.0	0		
		21537			1246	1068

$$\text{Acre-feet per month} \quad 21537 \times 60 \times 24 = 95.1 \quad 1246 \times 60 \times 24 = 5.5 \quad 1068 \times 60 \times 24 = 4.7$$

$$\frac{21537}{325851} = 95.1 \quad \frac{1246}{325851} = 5.5 \quad \frac{1068}{325851} = 4.7$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1950		1951		1951	
	December	Gauge Read.	January	Gauge Read.	February	Gauge Read.
1	.15	134	.40	2782	.60	6283
2	.15	134	.40	2782	.55	5285
3	.15	134	.40	2782	.50	4488
4	.20	179	.40	2782	.45	3635
5	.20	179	.40	2782	.45	3635
6	.25	224	.40	2782	.45	3635
7	.30	1077	.40	2782	.45	3635
8	.30	1077	.40	2782	.40	2782
9	.35	1924	.40	2782	.40	2782
10	.35	1924	.40	2782	.40	2782
11	.35	1924	.45	3635	.40	2782
12	.35	1924	.45	3635	.40	2782
13	.35	1924	.45	3635	.40	2782
14	.35	1924	.45	3635	.40	2782
15	.35	1924	.45	3635	.40	2782
16	.35	1924	.45	3635	.40	2782
17	.35	1924	.45	3635	.40	2782
18	.35	1924	.40	2782	.40	2782
19	.35	1924	.40	2782	.40	2782
20	.35	1924	.40	2782	.40	2782
21	.40	2782	.40	2782	.40	2782
22	.40	2782	.40	2782	.40	2782
23	.40	2782	.40	2782	.40	2782
24	.40	2782	.40	2782	.40	2782
25	.40	2782	.45	3635	.40	2782
26	.40	2782	.45	3635	.40	2782
27	.40	2782	.45	3635	.40	2782
28	.40	2782	.50	4488	.40	2782
29	.40	2782	.50	4488		
30	.40	2782	.50	4488		
31	.40	2782	.50	4488		
		56828		101596		89018

$$\frac{56828 \times 60 \times 24}{325851} = 251.0 \quad \frac{101596 \times 60 \times 24}{325851} = 448.7 \quad \frac{89018 \times 60 \times 24}{325851} = 393.$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1951 March		1951 April		1951 May	
	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.	Gauge Read.	Gallons per min.
1	.40	2782	.35	1924	.45	3635
2	.40	2782	.35	1924	.40	2782
3	.40	2782	.40	2782	.40	2782
4	.40	2782	.50	4488	.40	2782
5	.40	2782	.50	4488	.35	1924
6	.40	2782	.45	3635	.35	1924
7	.40	2782	.40	2782	.30	1077
8	.40	2782	.40	2782	.30	1077
9	.40	2782	.40	2782	.30	1077
10	.40	2782	.40	2782	.25	224
11	.40	2782	.40	2782	.25	224
12	.40	2782	.40	2782	.25	224
13	.40	2782	.35	1924	.25	224
14	.40	2782	.35	1924	.30	1077
15	.40	2782	.30	1077	.35	1924
16	.40	2782	.30	1077	.40	2782
17	.40	2782	.30	1077	.40	2782
18	.40	2782	.30	1077	.35	1924
19	.40	2782	.30	1077	.35	1924
20	.40	2782	.35	1924	.30	1077
21	.40	2782	.35	1924	.30	1077
22	.40	2782	.30	1077	.30	1077
23	.35	1924	.30	1077	.30	1077
24	.35	1924	.30	1077	.25	224
25	.35	1924	.25	224	.20	179
26	.35	1924	.35	1924	.10	89
27	.35	1924	.40	2782	.10	89
28	.35	1924	.40	2782	.0	0
29	.35	1924	.40	2782	.0	0
30	.35	1924	.40	2782	.0	0
31	.35	1924			.0	0
		78520		68303		37258

$$\text{acre-feet} \quad 78520 \times 60 \times 24 = 346.8 \quad 68303 \times 60 \times 24 = 301.7 \quad 37258 \times 60 \times 24 = 164.5 \\ \text{per month} \quad 325851 \quad 325851 \quad 325851$$

APPENDIX A

FEDERAL GOVERNMENT WATER GAUGES SHOWING THE
WATER LEFT IN THE STREAM FLOWING AT THE RATE
EXPRESSED IN GALLONS PER MINUTE AFTER BAGDAD
TAKES OUT WATER CONTINUOUSLY AT THE RATE OF
520 TO 700 GALLONS PER MINUTE.

Day	1951			
	June	Gauge Read.	July	Gallons per min.
1	.0	0	.0	0
2	.0	0	.0	0
3	.0	0	.0	0
4	.0	0	.0	0
5	.0	0	.0	0
6	.0	0	.0	0
7	.0	0	.0	0
8	.0	0	.0	0
9	.0	0	.0	0
10	.0	0	.0	0
11	.0	0	.0	0
12	.0	0	.0	0
13	.0	0	.0	0
14	.0	0	.0	0
15	.0	0	.0	0
16	.0	0	.0	0
17	.0	0	.0	0
18	.0	0	.20	179
19	.0	0	.30	1077
20	.0	0	.0	0
21	.0	0	.0	0
22	.0	0	.50	4488
23	.0	0	.30	1077
24	.0	0	.10	89
25	.0	0	.10	89
26	.0	0	.10	89
27	.0	0	.10	89
28	.0	0	.20	179
29	.0	0	.70	8078
30	.0	0	.30	1077
31			.20	179
		0		16930

Acre-feet
per month

$$\frac{16930 \times 60 \times 24}{325851} = 74.7$$

